7th North American International Conference on Industrial Engineering and Operations Management

HOLIDAY INN & SUITES ACROSS FROM UNIVERSAL ORLANDO

Orlando, Florida

June 12-14, 2022
Sponsors and Partners

Organizer

Industrial Engineering and Operations Management Society International

IEOM Society International, 21411 Civic Center Dr., Suite 205, Southfield, Michigan 48076, USA
Phone: 1-248-450-5660, Email: info@ieomsociety.org
Welcome to the 7th North American Conference on Industrial Engineering and Operations Management in Orlando

To All-Conference Attendees:

On behalf of the IEOM Society International, we would like to welcome you to the 7th North American International Conference on Industrial Engineering and Operations Management, June 11-14, 2022, hosted by Florida Polytechnic University. The venue is Holiday Inn & Suites Across from Universal Orlando. This unique international conference provides a forum for academics, researchers, and practitioners from many industries to exchange ideas and share recent developments in the fields of industrial engineering and operations management. This diverse international event provides an opportunity to collaborate and advance the theory and practice of major trends in industrial engineering and operations management. There were more than 600 papers/abstracts submitted from 40 countries. After a thorough peer-review process, more than 450 have been accepted for presentation and publication. The program includes many cutting-edge topics in industrial engineering and operations management.

This conference will address many of the issues concerning the continuous improvement of quality and service. The IEOM Society is delighted to have the following keynote speakers at their 7th North American Conference:
1. Dr. Randy Avent, President, Florida Polytechnic University, Florida, USA
2. Dr. Kay M. Stanney, CEO and Founder, Design Interactive, Inc. and Member, National Academy of Engineering (NAE), Orlando, Florida, USA
3. Professor Alex Frino, Deputy Vice-Chancellor (Global Strategy), University of Wollongong, Wollongong, NSW, Australia
4. Ms. Jessica Ascough, Chief Software Architect, AI Solutions Architect, Data Scientist, L3Harris Technologies, Florida, USA
5. Dr. Regina Relva Romano, Professor and Head of Smart Cities at Facens, Advisor to Brazil’s Ministry of Science, Technology, Innovation, and Communication, Brazil
6. H.D. Polumbo Jr., Maj Gen USAF (retired), Founding Partner and Senior Consultant, Two Blue Aces LLC, Winter Haven, Florida, USA
7. Dr. Duane Davis, Chief Physician Executive AdventHealth Institutes, Orlando, Florida, USA
8. Ms. Donna Slyster, Senior Vice President and CIO, Saddle Creek Logistics Services, Florida, United States
9. Dr. Mary Vollaro, Professor and Chair, Department of Mechanical Engineering and Environmental Engineering, Florida Polytechnic University, Lakeland, FL, USA
10. Dr. Mansooreh Mollaghasemi, Associate Professor, Industrial Engineering & Management Systems Department, University of Central Florida, Orlando, Florida, USA
11. Dr. Ahmed Kamel, Senior Key Expert, Additive Manufacturing and Innovation, Siemens Energy, Orlando, Florida, United States
12. Dr. Timothy Kotnour, Lockheed Martin St. Laurent Professor, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, USA

At this conference, the IEOM Society will hold its 30th Global Engineering Education session. It will feature distinguished speakers who will discuss workforce readiness and engineering education challenges and opportunities. The 29th IEOM Industry Solutions will showcase will also be held and feature major topics including IoT, AI, data analytics, iCloud, cybersecurity, automation, digital manufacturing, MSV, and industry best practices. The 9th IEOM Global Supply Chain and Logistics will address the global logistic challenges due to the pandemic. Eight-panel sessions have been planned: Industry 4.0, Industry Solutions, Global Engineering Education, Supply Chain, Women in Industry and Academia, Presidential Panel on the Future of IEOM Discipline, and Diversity & Inclusion sponsored by Ford Motor Company.

The IEOM Society would like to express our deep appreciation to our sponsors, university partners, organization partners, exhibitors, authors, reviewers, keynote speakers, panelists, track chairs, advisors, the local committee, and the many volunteers who have given so much of their time and talent to make this unique international conference an overwhelming success.

Our conference host, Florida Polytechnic University, would like to extend a warm welcome to all participants. The IEOM Society Conference Organizing and Planning Committee hopes you enjoy visiting Orlando.

Our very best wishes to all of you for a successful and memorable event.
Conference Overall Program

Day 1 – June 11 (Saturday)
Student Competitions (Virtual) + Parallel Sessions

Day 2 – June 12 (Sunday)
8:00 – 9:30 am – Plenary I, Global Engineering Education and Parallel Sessions
9:30 – 10:00 am – Networking and Coffee Break
10:00 – 10:20 am – Welcome and Opening
10:20 – 11:00 am – Keynote Speaker I: Dr. Randy Avent, President, Florida Polytechnic University, Florida, USA
11:00 – 11:40 am – Keynote Speaker II: Dr. Kay M. Stanney, CEO and Founder, Design Interactive, Inc. and Member, National Academy of Engineering (NAE), Orlando, Florida, USA
11:40 am – 12:20 pm – Keynote Speaker III: Professor Alex Frino, Deputy Vice-Chancellor (Global Strategy), University of Wollongong, Wollongong, NSW, Australia
12:20 – 1:00 pm – Keynote Speaker IV: Ms. Jessica Ascough, Chief Software Architect, AI Solutions Architect, Data Scientist, L3Harris Technologies, Florida, USA
1:00 – 2:00 pm Networking Lunch (Provided)
2:00 – 3:30 pm – Panel I, Global Engineering Education and Technical Parallel Sessions
3:30 – 4:00 pm – Networking and Coffee Break
4:00 – 6:00 pm – Panel II – Presidential Panel on the Future of IEOM Discipline

Day 3 – June 13 (Monday)
8:00 – 9:30 am – Industry Solutions and Technical Parallel Sessions
9:30 – 10:00 am – Networking and Coffee Break
10:00 – 10:20 am – Conference Chair Remarks
10:20 -11:00 am – Keynote Speaker V: Dr. Regiane Relva Romano, Professor and Head of Smart Cities at Facens, Advisor to Brazil’s Ministry of Science, Technology, Innovation and Communication, Brazil
11:00 – 11:40 am – Keynote Speaker VI: H.D. Polumbo Jr., Maj Gen USAF (retired), Founding Partner and Senior Consultant, Two Blue Aces LLC, Winter Haven, Florida, USA
11:40 am – 12:20 pm – Keynote Speaker VII: Dr. Duane Davis, Chief Physician Executive AdventHealth Institutes, Orlando, Florida, USA
12:20 – 1:00 pm – Keynote Speaker VIII: Ms. Donna Slyster, Senior Vice President and CIO, Saddle Creek Logistics Services, Florida, USA
1:00 – 2:00 pm Networking Lunch (Provided)
2:00 – 3:30 pm – Panel III, Industry Solutions and Technical Parallel Sessions
3:30 – 4:00 Networking and Coffee Break
4:00 – 6:00 pm – Panel IV, Industry Solutions and Technical Parallel Sessions

Day 4 – June 14 (Tuesday)
8:00 – 9:30 am – Global Supply Chain & Logistics and Parallel Sessions
9:30 – 10:00 am – Networking and Coffee Break
10:00 – 10:20 am – Conference Industry Chair Remarks
10:20 -11:00 am – Keynote Speaker IX: Dr. Mary Vollaro, Professor and Chair, Department of Mechanical Engineering and Environmental Engineering, Florida Polytechnic University, Lakeland, FL USA
11:00 – 11:40 am – Keynote Speaker X: Dr. Mansooreh Mollaghasemi, Associate Professor, Industrial Engineering & Management Systems Department, University of Central Florida, Orlando, Florida, USA
11:40 am – 12:20 pm – Keynote Speaker XI: Dr. Ahmed Kamel, Senior Key Expert, Additive Manufacturing and Innovation, Siemens Energy, Orlando, Florida, United States
12:20 – 1:00 pm – Keynote Speaker XII: Dr. Timothy Kotnour, Lockheed Martin St. Laurent Professor, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, USA
1:00 – 2:00 pm Networking Lunch (Provided)
2:00 – 3:30 pm – Panel V, Global Supply Chain & Logistics and Parallel Sessions
3:30 – 4:00 pm – Networking and Coffee Break
4:00 – 6:00 pm – Panel VI, Global Supply Chain & Logistics and Parallel Sessions
7:00 – 10:00 pm – Conference Awards Dinner (Student registraton does not include dinner, student can buy dinner ticket)
Keynote Speakers – Ballroom (Room 1)

Conference Welcome and Opening: Sunday, June 12, 2022, 10:00 – 10:20 am

Opening Keynote I: Sunday, June 12, 2022, 10:20 – 11:00 am

Dr. Randy Avent
President
Florida Polytechnic University
Florida, USA

Dr. Randy K. Avent is founding president of Florida Polytechnic University, the state’s only public university dedicated 100% to STEM. Named the University’s inaugural president in 2014, Avent is responsible for its development and operation, and is committed to strategically advancing Florida Poly as a research-and-jobs institution, an agent for growth, and a beacon for the economy. His career exemplifies the qualities of innovation, leadership, and entrepreneurship the University seeks to instill in students. An accomplished academician, senior administrator, and research scientist, Avent has an extensive background teaching and directing research at higher-education institutions dedicated to science, technology, engineering, and mathematics (STEM).

Keynote II: Sunday, June 12, 2022, 11:00 – 11:40 am

Kay M. Stanney, Ph.D.
CEO and Founder, Design Interactive, Inc.
Member, National Academy of Engineering (NAE)
Orlando, Florida, USA

Dr. Kay M. Stanney is CEO and Founder of Design Interactive (DI), Inc., a woman-owned, small business focused on human-systems integration. She is recognized as a leader in extended Reality (XR, Virtual Reality, Augmented Reality, Mixed Reality) systems, especially as they relate to training, human performance, and cybersickness. In 2019, she was inducted into the National Academy of Engineering (NAE) for her contributions to human factors engineering through virtual reality technology and strategic leadership. Her research has influenced the design of current generation XR headsets, Universal Studios and Disney immersive experiences, Chevron immersive environments, Procter & Gamble training solutions, as well as numerous military XR systems. Stanney has been a pioneer in formalizing XR R&D by serving as editor of the Handbook of Virtual Environments: Design, Implementation, and Applications (1st edition, 2002, LEA; 2nd edition, 2014, CRC Press), cofounding/ co-chairing the 1st International Conference on Virtual Reality, and co-founding the Virtual Environments Technical Group (VETG) within the Human Factors and Ergonomics Society. In recognition of these efforts, Dr. Stanney received the 2006 IEEE Virtual Reality Technical Achievement Award from the IEEE Computer Society, an award designed to honor individuals for their seminal technical achievement in virtual and augmented reality.

Keynote III: Sunday, June 12, 2022, 11:40 am – 12:20 pm

Professor Alex Frino
Deputy Vice-Chancellor (Global Strategy)
University of Wollongong
Wollongong, NSW, Australia

Professor Alex Frino is a distinguished financial economist who fosters the interaction of business with academe. He is an alumnus of UOW and Cambridge University, and a former Fulbright Scholar. He is one of the best published financial economists in the world with over 100 papers in leading scholarly journals. He has won over $10 million in competitive research funding and is frequently cited in the global press. Professor Frino was previously Chief Executive Officer of the Capital Markets Cooperative Research Centre Ltd and has held visiting academic positions at leading Universities in Italy, New Zealand, the UK and the United States. He has also held positions with leading financial market organisations, including the Sydney Futures Exchange, Credit Suisse and the Commodity Futures Trading Commission in the USA. He is regularly called upon to act as an independent expert witness in major Australian court cases and has acted as a consultant to many large Australian listed companies.

Keynote IV: Sunday, June 12, 2022, 12:20 – 1:00 pm

Ms. Jessica Ascough
Chief Software Architect, AI Solutions Architect, Data Scientist
L3Harris Technologies
Florida, USA

Jessica Ascough is a L3Harris Technologies Scientist. Over the past twenty-eight years Jessica has served as a Chief Software Engineer, Chief Software Architect, Principal Investigator, Solutions Architect, and Data Scientist, identifying and developing software, system, security, mission critical network, energy, predictive analytics, algorithmic processing chain, and artificial intelligence solutions and services for proprietary and commercial programs. Jessica has five U.S. patents for Seismic Analysis and one patent pending for Patterns-of-Life/Patterns-of-Activity Normalcy Models. Jessica’s L3Harris awards include “Trusted Advisor & Industry Thought Leader”, “Innovation”, “Rainmaker”, “Beyond the Call of Duty”, “Outstanding Leadership”, “Teamwork”, “Golden Quill”, and “Best Conference Paper”. Jessica has actively participated in, and presented at, organizations and conferences such as the North American SynchroPhasor Initiative (NASPI).
Jessica was the 2010 Co-Chair of the Cybersecurity Working Group for the international Network Centric Operations Industry Consortium (NCOIC). Currently, Jessica is performing Chief Systems Engineer duties for an analytics hybrid cloud App Store Marketplace. Recently, Jessica architected an unsupervised real-time dissimilar phenomenologies generalized upstream fusion framework, that is mission and data independent, to generate generic normalcy models.

Previously, Jessica worked ten years with Florida Power Corporation, now Duke Energy, and was the first female Journeyman Lineman, constructing, maintaining, and troubleshooting electrical power distribution and transmission lines. Jessica holds a Bachelor’s of Science in Computer Science (BSCS) from USF, a Master’s of Science in Engineering Management (MSEM) from UCF, and a Master’s of Science in Predictive Analytics (MSPA) from Northwestern University.

Monday, June 13, 2022

Conference Chair Remarks: Monday, June 13, 2022, 10:00 – 10:40 am

Keynote V: Monday, June 13, 2022, 10:20 – 11:00 am

**Dr. Regiane Relva Romano**
Professor and Head of Smart Cities at Facens
Advisor to Brazil’s Ministry of Science, Technology, Innovation and Communication, Brazil

Has over 30 years of international experience working in technology and innovation. Former as Special Adviser to the Ministry of Science, Technology and Innovation in Brazil. Head of Research and General Coordinator at Smart Campus FACENS, a prototype of a Smart City inside the College, that received the “Top Educational/ABMES” and the “Innovation GS1” awards in 2016; “Smart City UK-London” in 2017; “Best IoT Implementation Europe IdTechEx”, “Top of Academy/RFIDBR/2018” and “Inovecidae” at Smart City Business America 2019. Also work as CEO at VIP-SYSTEMS Informática. Writer. Professor at FGV, FIA, ESALQ/USP, FDC, EINSTEIN and FACENS, International speaker. Consultant of innovation and technologies applied to businesses, retail and Smart Cities. As a researcher in the business and emerging technologies, she has lectured in China, Dubai, Germany, Colombia, Poland, The Netherlands, Uruguay, Canada, Spain, Perú, Portugal, United States, and others. She developed the First Smart Store in Latin America, in 2011, and is widely recognized as an expert in topics related to Smart and Sustainable Cities, retail, RFID and technology. She earned a Ph.D. in a concentration in Information Technology Management, at FGV and a Master's degree in Informatics Management of Information Systems from PUC-CAMPINAS. She completed some studies in the improvement of international Retailing at the University of Ohio, in RFID at the University of Arkansas, in Business at Columbia University and in Smart Cities at Lleida University.

Keynote VI: Monday, June 13, 2022, 11:00 – 11:40 am

**H.D. Polumbo Jr.**
Maj Gen USAF (retired)
Founding Partner and Senior Consultant
Two Blue Aces LLC, Winter Haven, Florida, USA

Major General H.D. “Jake” Polumbo (ret) is a founding partner and senior consultant for Two Blue Aces, LLC, a leadership firm that specializes in strategic reviews, business plan development, leadership training and mentoring. His primary focus is in the defense and aerospace sectors, with an emphasis on leadership and business networking. In 2015, after 34 years of service, Jake retired from the Air Force as the commander of the Ninth Air Force in South Carolina, comprising eight active-duty wings in the southeastern United States with more than 450 aircraft and over 29,000 active-duty and civilian personnel.

He entered active duty as a graduate of the U.S. Air Force Academy in 1981 and commanded at the squadron, group, and three times at the wing level. He served in strategic planning positions in Europe as the director of strategy and plans at U.S. Africa Command and in the Pentagon as the assistant deputy director for Global Operations on the Joint Staff. General Polumbo also served as a task force commander in Afghanistan in 2012. He attended the Federal Executive Institute and was a Senior Fellow at Georgetown University’s Institute for the Study of Diplomacy. A decorated command pilot, Jake logged over three thousand flying hours in all models of the F-16 and holds the distinction as the first and only U.S. Air Force general officer to fly the U-2S in combat, completing twenty-one missions in Operations Enduring Freedom and Iraqi Freedom.

Jake is the Past Chair on the Board of the Central Florida Development Council, serves as an advisor for the aviation program at Southeastern University in Lakeland, Florida, and also volunteers for his church in various capacities. He is active in the local General Aviation community, is a Certified Flight Instructor – Instrument (CFII) in single and multi-engine land aircraft as well as an instructor pilot in single engine seaplanes. Jake and his wife Sandra, a Florida native, have been married for forty years. Their oldest son, Chad, is a Lieutenant Colonel in the U.S. Air Force with his wife, Julie, and they have two sons, Nolan and Garrett. Jake and Sandra’s youngest son, Erik, lives in Virginia with his wife, Alexine, where they run four very successful businesses together.
### Keynote VII: Monday, June 13, 2022, 11:40 am – 12:20 pm

**Dr. Duane Davis**  
Chief Physician Executive  
AdventHealth Institutes  
Orlando, Florida, USA

Dr. Duane Davis is the Chief Physician Executive of AdventHealth Institutes. As CPE, Dr. Davis oversees the Cardiovascular, Cancer, Neurosciences, Orthopedic, Digestive Diseases and Surgery Institutes of AdventHealth Central Florida Division based in Orlando, Florida. He is responsible for strategy, quality and consultative engagement for the finances and operations of these Institutes, all nationally ranked or recognized by U.S. News & World Report. He remains clinically active in the lung transplant and CTEPH programs.

Prior to joining AdventHealth, Dr. Davis was Professor of Surgery and Director of Transplantation at Duke University Medical Center, where he served for over two decades. Prior to leaving Duke, he had performed the most lung transplants worldwide. Published in more than 250 referred journals, Dr. Davis has also contributed to 27 books and over 150 selected abstracts. As an expert in his field, Dr. Davis has been served as a consultant on over 58 advisory boards and committees and has given numerous educational presentations worldwide. His areas of research interest include: the role of environmental exposure and innate immunity of chronic pulmonary allograft injury; optimization of donor lung utilization—novel strategies to preserve and improve lung organ function; lung transplant outcomes; and tolerance in lung transplantation. Since 2010, his research has raised NIH external support exceeding $4 million. He is currently licensed to practice medicine in Florida, North Carolina, Missouri and Virginia, and certified by the National Board of Medical Examiners, the American Board of Surgery, and the American Board of Thoracic Surgery. Dr. Davis received his Doctor of Medicine from the University of California medical school in Los Angeles, California, and later earned a Master of Business Administration from Fuqua School of Business at Duke University, focused on Health Sector Management. He holds two Bachelor of Science degrees from Stanford University in Chemical Engineering and Biologic Sciences. He is married with three children and resides in Winter Park, Florida.

### Keynote VIII: Monday, June 13, 2022, 12:20 – 1:00 pm

**Ms. Donna Slyster**  
Senior Vice President and CIO  
Saddle Creek Logistics Services  
Florida, United States


### Tuesday, June 14, 2022

#### Conference Industry Chair Remarks: Tuesday, June 14, 2022, 10:00 – 10:20 am

**Keynote IX: Tuesday, June 14, 2022, 10:20 – 11:00 am**

**Dr. Mary Vollaro**  
Professor and Chair  
Department of Mechanical Engineering and Environmental Engineering  
Florida Polytechnic University  
Lakeland, FL USA

Dr. Mary B. Vollaro is chair of the Department of Mechanical Engineering and an associate professor of mechanical engineering at Florida Polytechnic University. Prior to that, she was assistant, then associate professor of mechanical engineering from 1997 to 2016 at Western New England University (WNE) in Springfield, Massachusetts. While there she was involved in university governance and chaired the Faculty Senate (twice) and the General University Requirements Committee and the Academic Standards Committee multiple times. She developed the Honors Program in the College of Engineering, as well as the Grand Challenge Scholars Program at WNE.

Vollaro has held engineering positions in industry and holds one patent. Involved with engineering education, she was chair of the ASEE Materials Division and continues to be active in that ASEE Division. She has written in the area of materials science education and is now working on leadership and teaming activities for engineers.
Keynote X: Tuesday, June 14, 2022, 11:00 – 11:40 am

Dr. Mansooreh Mollaghasemi
Associate Professor
Industrial Engineering & Management Systems Department
University of Central Florida
Orlando, Florida, USA

MANSOOREH MOLLAGHASEMI is an associate professor of Industrial Engineering and Management Systems at the University of Central Florida. She received her Ph.D. in Industrial Engineering from the University of Louisville in 1991. She also holds a B.S. and an M.S. in Chemical Engineering from the same University. Her research interests involve simulation modeling and analysis, multiple response simulation optimization, and neural networks. She is a member of IIE and INFORMS.

Keynote XI: Tuesday, June 14, 2022, 11:40 am – 12:20 pm

Dr. Ahmed Kamel
Senior Key Expert, Additive Manufacturing and Innovation
Siemens Energy
Orlando, Florida, United States

Dr. Kamel has more than 25 years in the automotive and gas turbine industries with a focus on rapid prototyping and rapid manufacturing. He is currently a senior key expert of additive manufacturing and innovation at Siemens Energy. In his current role, Dr. Kamel consults for global teams to diffuse the use of additive manufacturing to drive innovation in design, manufacturing and repair of gas turbine components. His research is currently focused on the design of superalloys for 3D printing. Dr. Kamel has been granted more than 100 patents in the US, Europe and Asia. In 2021, he was nominated for the Siemens Energy Inventor of the year award.

He earned his Bachelor of Science and Advanced graduate degrees in Mechanical and Aerospace engineering from the American University in Cairo (Egypt) and Carleton University (Ottawa, Canada). He also holds a doctorate in Business Administration with a focus on Operations management and Innovation from the Crummer Graduate School of Business (Rollins College, Florida). He is also a certified Innovation Engineering practitioner by the Innovation Engineering Institute (Cincinnati, Ohio).

Keynote XII: Tuesday, June 14, 2022, 12:20 – 1:00 pm

Dr. Timothy Kotnour
Lockheed Martin St. Laurent Professor
Department of Industrial Engineering and Management Systems
University of Central Florida
Orlando, Florida, USA

Tim Kotnour, Ph.D., is the Lockheed Martin St. Laurent Professor in the Department of Industrial Engineering and Management Systems at the University of Central Florida. He is the Director of the UCF Engineering Leadership and Innovation Institute (eli2) and the Professional Engineering Management Program. He completed his doctorate in Industrial & Systems Engineering from Virginia Tech. His core work focuses on “making strategy real.” He integrates both corporate and academic settings by partnering with senior management teams to develop solutions through technical assistance, education, training, and research. He focuses on strategic management, organizational transformations, and solution delivery. He provides professional presentations and strategic conversation facilitation to leadership teams as large as 200+ people. He has been actively engaged with multiple executive teams in leading significant transformations including NASA’s Kennedy Space Center, NASA’s Launch Services Program, NASA’s Exploration Ground Systems, and the transformation of the packaged-goods model to a mobile, social, and direct-to-consumer business model within the video-game industry. In 2016, 2005, and 2001, Tim was awarded a NASA Public Service Medal for the partnership work with KSC. He has lead transformations within the university setting. He is author of the book “Transforming Organizations: Strategies and Methods” and co-author of the book “Inspiring the Leader Engineer—Instilling the Burning Desire and Confidence to Change the World.” He served as the Editor of the Engineering Management Journal and is a Fellow of the American Society for Engineering Management.
Plenary Speakers

Sunday, June 12, 2022

Plenary I
June 12, Sunday, 8:00 – 9:30 am, Room 1 (Onsite) - Ballroom
Session Chair: Dr. Luis Rocha Lona

8:00 am – 8:30 am, Sunday, June 12

Dr. Luis Rabelo
Professor, Department of Industrial Engineering & Management Systems
University of Central Florida, Orlando, FL, USA

Dr. Luis Rabelo received the BS in Electro-Mechanical Engineer from the Technological University of Panama in 1983, an MS in Electrical Engineering from the Florida Institute of Technology in 1987 Master’s and Doctorate in Engineering Management from the University of Missouri. He was a Postdoc at the University of Missouri in Nuclear Engineering. Dr. Rabelo received a dual MS in Systems and Management from the Massachusetts Institute of Technology. He has worked for the Advanced Technology Group (Goodrich) and Honeywell Laboratories. Dr. Rabelo was a NASA Fellow from 2002 to 2005, and a Project Manager at NASA from 2009 to 2011. He is currently Professor in the Industrial Engineering and Management Systems Department at UCF. He is also the Undergraduate Coordinator. He has written more than 300 articles and a book in Artificial Intelligence. He has been the principal advisor for 39 Master’s students and 29 PhDs. He received the award for the Best Scientific Article of the Year 2004 from the Society of Automotive Engineers, received the distinction “ONE NASA” in 2006. He was the recipient of the Fulbright Distinction in 2008. In November 2008, he received the honor of the Technological University of Panama (UTP) of being the 2008 Distinguished Alumni. In 2011, he was the Henaaac Award Winner in Education. In 2013 and 2018, he received the Forest R. McFarland Award from the Society of Automotive Engineering (SAE). Lately, he received the SAE Russell S. Springer Award for his article on the modeling of space operations systems in 2017.

8:30 – 9:00 am (Sunday, June 12)

Hailey Skoglund
Data Analyst
The Walt Disney Company
Orlando, Florida, USA

Hailey Skoglund is from Spring Hill, Florida and works as a Data Analyst at The Walt Disney Company under the Commercial Optimization Platform Insight (COPI) Data Science team. Throughout Hailey’s time at Disney, she has had the opportunity to navigate large, complex data sets using industry tools—which to extract and visualize data-driven insights and provide strategic recommendations for stakeholders across The Walt Disney World theme parks. Prior to her career at The Walt Disney Company, Hailey was an Electronic Data Interchange (EDI) Configuration Analyst at PlanSource, an employee benefits management platform.

Hailey received her bachelor’s degree in Business Analytics with a concentration in Quantitative Economics and Econometrics from Florida Polytechnic University. She is currently working on her master’s degree in Analytics from the Georgia Institute of Technology. Her research interests are focused in applied microeconomics, data analytics, and lean six sigma.

Hailey is very active in her community through her involvement in the IEEE-HKN, Phi Theta Kappa, and Psi Beta honor societies. She also serves as a board member on the Florida Polytechnic University Foundation Board of Directors and volunteers at the Lighthouse for the Visually Impaired and Blind. Hailey also serves as a member of Disney Emerging Professionals and speaks on the Diversity Equity and Inclusion Council at The Walt Disney Company. Hailey is also a proud recipient of the Business and Professional Women Scholarship.

9:00 – 9:30 am (Sunday, June 12)

Dr. Luis Rocha Lona
Lecturer in Operations Management, Business School
National Polytechnic Institute of Mexico
México City, Mexico

Tec de Monterrey, Campus Santa Fe

Luis Rocha-Lona is a Lecturer in Operations Management at the Business School at National Polytechnic Institute of Mexico and at Tec de Monterrey, Campus Santa Fe. Luis Rocha graduated from the National Polytechnic Institute of Mexico (IPN) as Automation Control Systems Engineer. Then, he pursued an MSc in Control Systems with a major in information systems/manufacturing at the University of Sheffield, UK. He holds a PhD in Operations Management from The Manchester Business School. Dr Luis Rocha-Lona has eight years of working experience in the public and private sectors. He has lead several projects involved with service and manufacturing organisations and is currently supervising Master and PhD students at National Polytechnic Institute of Mexico.
8:00 am – 8:30 am (Monday, June 13)

**Eric Ayanegui, CPMM, CRL**  
Director Operations Engineering  
Cintas Corporation  
Houston, Texas, USA

Mr. Eric Ayanegui is currently the director of Operations Engineering of CINTAS. As one of the technical leaders at CINTAS, he has been directing engineering, reliability, quality and safety initiatives across 210 industrial sites across North America and China. He has over 20 years of experience in the industrial laundry industry and has been involved in industrial leading efforts in Reliability and Safety. He is a member of the CINTAS Corporate Executive Faculty teaching Reliability and a certified Plant Maintenance Manager and Certified Reliability Leader. He is a member of Industrial Engineering Academy of Distinguished Alumni of UH and has served on the advisory board of Industrial Engineering Department at UH since 2015. He holds a BS degree in Industrial Engineering from the University of Houston.

8:30 am – 9:00 am (Monday, June 13)

**Joseph Akyeampong, PhD**  
Human Factors Engineering Consultant  
Amgen  
Fort Lauderdale, Florida, United States

Dr. Joseph Akyeampong is a creative Industrial & Systems engineer who currently works as Human Factors Engineering consultant at Amgen. He has spent his career applying his Human Factors expertise on the development of safe and effective biopharmaceutical combination products (at Amgen), medical devices (at Medtronic and Stryker), and nuclear power plant control rooms (at General Electric and Westinghouse). Notable projects he has worked on include: Amgen combination products including prefilled syringes and autoinjectors; the Stryker Mako robot for orthopedic/joint replacement surgeries; various Medtronic programmable neuromodulation systems; the Westinghouse AP1000; and the GE-Hitachi Economic Simplified Boiling Water Reactor (ESBWR). Dr. Akyeampong received his PhD in Industrial & Systems Engineering from North Carolina A&T State University (USA) and a Bachelor’s in Mechanical Engineering from Kwame Nkrumah University of Science and Technology (Ghana).

Dr. Akyeampong is passionate about human factors engineering and technological innovations in general, with strong interests in healthcare.

9:00 am – 9:30 am (Monday, June 13)

**Paul Odomirok**  
President and CEO  
Performance Excellence Associates, Inc.  
St Augustine, Florida, USA

For the past 45 years, Paul has been involved in several careers spanning Academia, Engineering and Development, Manufacturing, Corporate Executive Leadership, Consulting and Entrepreneurship. In his ‘first career’, he taught Mathematics and Computer Science at all levels of learning, from Pre-School to Post-PhD. He was even involved in designing graduate level curriculums at the University of South Carolina as an Adjunct Professor. His second career began in 1985 with NCR (National Cash Register). Beginning as a Senior Programmer Analyst, he was promoted to Manager - Software Development, Product Manager, Manager – Product Management, Corporate Strategic Planner for Banking and Retail, Director – Retail Systems Product Integration, Retail Systems Manufacturing, Director of Quality and Customer Satisfaction, and Corporate Coach. During his stint in corporate America, he was involved in the NCR/AT&T merger, and was responsible, as a Director of Quality, for the cultural transformation and change leadership for the Retail Systems Division Organization in Duluth, Georgia, at the Lean Manufacturing Plant. Leveraging his involvement with Bell Labs Organization Effectiveness Group and Harvard Business School T.E.A.M. Research Study, he left NCR/AT&T in 1995 to pursue a consulting career, in the areas of Leadership, Strategy, and Performance Improvement. Over the past 25 years, he has worked with more than 100 organizations on over 250 strategic, leadership and performance improvement projects and programs. His past clients include Anixter, AT&T, Boeing, IISE, Motorola, GM, Northrop Grumman, U.S. Department of Defense and many major Universities. Most recently he provided performance improvement assistance to LXE, Crosby Tools, CNA Insurance, Fibervisions, DeLaval, Perkins and Will, Boston Whaler, The Department of Defense, Care Logistics, Mediators, Med America, Sparta, Emory Hospital, Grady, Oscar Health, Health First, ASAA Insurance, The Georgia Hospital Association and many others encompassing several markets and industries including; Engineering, Manufacturing, Healthcare, Aerospace, Telecommunications, Government, Defense, Supply Chain, Energy, Retail, Banking, Academics and Higher Learning. His first book, “Affordability: Integration of Value, Customer and Cost for Continuous Improvement” was released December 2016. His newest book, “Healthcare Affordability: Motivate People, Improve Processes, and Increase Performance.”, was released September 2018. He is currently, President and CEO of Performance Excellence Associates, Inc.
Plenary III
June 14, Tuesday, 8:00 – 9:30 am, Room 1 (Onsite) - Ballroom
Session Chair: Sandro Paz, Ph.D.

8:00 – 8:30 am (Tuesday, June 14)
Dr. Tali Freed
Director, PolyGAIT-RFID Reseach and Development Center
Professor, Industrial and Manufacturing Engineering Department
California Polytechnic State University
San Luis Obispo, California, USA

Dr. Freed received her Ph.D. from the U.C. Berkeley Department of Industrial Engineering and Operations Research. Her B.Sc. and M.Sc. are in Industrial Engineering and Management, from the Technion-Israel Institute of Technology. Dr. Freed’s industrial experience includes leading process improvement and system development projects in the electronics and semiconductor manufacturing industry, as a consultant and as a senior engineer. She was also the first female electronics technician in the Israeli Air Force. Her research areas include RFID (radio frequency identification), production planning and scheduling, design of production systems, development of information systems, production costing models, and organization design for effectiveness. She has published journal articles, a book chapter, and case studies on these topics.

8:30 – 9:00 am (Tuesday, June 14)
Sandro Paz, Ph.D.
Director of the Industrial Engineering Program – PUCP
Former Director of University Accreditation
Pontificia Universidad Catolica del Peru
San Miguel, Peru

Sandro Paz is a Professor at the Pontificia Universidad Catolica del Peru (PUCP). He graduated from PUCP as an Industrial Engineer, holds a MS from the University of Puerto Rico, and a PhD in Industrial Engineer from University of South Florida. Dr. Paz was the Director in the Peruvian accreditation board, which has allowed him to learn about the Peruvian university system. He also has worked in several consulting projects related with optimization and quality management. As of today, he is Program Director of Industrial Engineering (undergraduate) and Engineering Management (graduate) programs. He leads the accreditation process for all engineering programs at PUCP that have achieved accreditations from CEAB (Canada), Abet (USA), and Iacit (Peru)

9:00 – 9:30 am (Tuesday, June 14)
Dave Harry
Black Belt Trainer / Kata Coach
President & CEO, Process Whisperer® Consultants LLC
Greeneville, TN, USA

Experienced Lean Six Sigma Champion, Black Belt, Six Sigma Instructor, US Naval Officer, Naval Aviator, change agent and Project Manager. PMI Certified Project Management Professional (PMP®), Triple accreditation as Certified Six Sigma Black Belt (CSSBB) from ASQ, Rolls-Royce and Northrop Grumman and a SME Lean Bronze Certified (LBC). Currently leading Process Whisperer® Consultants offering specialized business process analysis and project management consulting services. Lean Six Sigma Instructor and Coach at TMG, Inc and Toyota Kata Coach and Instructor. Dedicated volunteer to many organizations including ASQ, PMI, and IISE. Most recently Six Sigma Trainer for University of Tennessee Center for Industrial Services (UT-CIS) and Continuous Process Improvement Commercial Black Belt. lean instructor, and internal auditor with Rolls-Royce Energy Systems in Mount Vernon, OH. Formerly a DoD
Dr. Saso Krstovski, MBB
Lean Manufacturing Coach/Six Sigma Master Black Belt
Van Dyke Transmission Plant
Ford Motor Company
Michigan, USA

Dr. Saso Krstovski works for Ford Motor Company – Van Dyke Transmission Plant as a Lean Manufacturing Coach and Six-Sigma Master Black Belt. With over twenty years of service with Ford Motor Company, Dr. Krstovski has held a multitude of engineering assignments, which includes time working as a Test Engineer, Launch Test Engineer, and Electrical Control Engineer. During his time with Ford Motor Company, Dr. Krstovski has worked in several plant environments and skill teams such as Dearborn Tool & Die Plant, Information Technology, and has held front-line supervision roles managing hourly UAW-Ford production employees. This exposure to new work concepts within Ford has allowed Dr. Krstovski to amass a holistic approach to engineering. As such, Dr. Krstovski has gained an extensive understanding of the Six-Sigma methodologies. As a detail oriented and data-driven engineer, Dr. Krstovski is an invaluable contributor to Ford Motor Company. He is highly distinguished and skilled with problem identification and resolution to avoid time and cost expenditures. Dr. Krstovski recently joined Lawrence Technological University as an Adjunct Professor and is currently teaching in the Engineering Department. Dr. Krstovski's research interests lie in the area of System Optimization. He continues to collaborate actively with researchers at several universities. Dr. Krstovski provides guidance globally to doctoral candidates on dissertation direction. He graduated from Lawrence Technological University with a Doctorate of Engineering in Manufacturing Systems (DEMS). In addition, to his doctorate degree, Dr. Krstovski has a Masters in Electrical Computer Controlled Systems and a Bachelor’s of Science in Electrical Engineering from Wayne State University. Dr. Krstovski has authored several publications and scientific articles on various engineering topics.

Dr. Daw Alwerfalli
Professor of Mechanical and Manufacturing Engineering
Director of Master of Engineering Management Program
College of Engineering
Lawrence Technological University
Southfield, Michigan, USA

Bio: Prominent professor, senior technical industry consultant and manufacturing engineering educator with a tremendous expertise in program and curriculum development in higher technical education. Highly experienced and dedicated community leader with great ability to work with an array of constituencies and coalitions in developing shared organizational vision to create and implement strategies aimed at advancing common causes to accomplish goals in fulfillment of the organization’s mission. Highly perceived expert and industrial advisor. He is the founder of Manufacturing Engineering Solutions (MES) a consulting firm founded in 2000. He is senior technical consultant and strategist to the US manufacturing industry. MES developed executive training programs to numerous organizations such as Chrysler, Ford, GM, Exxon Mobil, Conco Philips, Marathon and Tier I and II suppliers to the US auto industry and other international companies. Published numerous research papers in many national and international conferences.

Dr. Alwerfalli is a recipient of many prestigious awards including, the 2009 Arab American of the year in education, 1997 Lawrence Tech. Excellence in Teaching Award, 2004 Outstanding Engineering Faculty. He serves on many boards of directors, he also served on the Advisor Council of the Governor of Michigan for the Arab American and Chaldean Affairs Committee. He is currently serving on the steering committee of MAT 2 for dual education where he is a lead assessor to evaluate colleges for readiness in joining MAT 2 coalition of several German US based companies. Dr. Alwerfalli is also serving on the steering committee of "LIFT" Light weighted Innovation for Tomorrow. The committee is to develop innovative educational curriculum and skills for the next generation workforce for the Michigan, Ohio, Indiana and Tennessee under $148 Million, a federal grant for the year 2015-2016. For several years, Dr. Alwerfalli served as the academic advisor of many doctoral students who obtained their doctorate degrees and are currently leaders in the US auto industry.

IEOM Orlando Conference  Plenary Speakers  June 11-14, 2022

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Panel Sessions

Panel on Lean Six Sigma (Panel I)
2:00 – 3:30 pm, Sunday, June 12, 2022 – Onsite Room 1

Panel Chair

Dave Harry
Black Belt Trainer / Kata Coach
President & CEO, Process Whisperer® Consultants LLC
Greeneville, TN, USA

Experienced Lean Six Sigma Champion, Black Belt, Six Sigma Instructor, US Naval Officer, Naval Aviator, change agent and Project Manager. PMI Certified Project Management Professional (PMP®), Triple accreditation as Certified Six Sigma Black Belt (CSSBB) from ASQ, Rolls-Royce and Northrop Grumman and a SME Lean Bronze Certified (LBC). Currently leading Process Whisperer® Consultants offering specialized business process analysis and project management consulting services. Lean Six Sigma Instructor and Coach at TMG, Inc and Toyota Kata Coach and Instructor. Dedicated volunteer to many organizations including ASQ, PMI, and IISE. Most recently Six Sigma Trainer for University of Tennessee Center for Industrial Services (UT-CIS) and Continuous Process Improvement Commercial Black Belt, lean instructor, and internal auditor with Rolls-Royce Energy Systems in Mount Vernon, OH. Formerly a DoD Black Belt and instructor with US Joint Forces Command and Independent Verification and Validation (IV&V) software engineer and a Cost Benefit Analyst for US Government programs. Progressively responsible broad program management experience as Naval Officer and defense contractor. Multiple Masters-Level degrees (Management, Systems Management and Foreign Affairs).

Specialties: Lean Six Sigma Champion, Black Belt and Lean Six Sigma Instructor, Certified Project Management Professional (PMP®), Rolls-Royce, Northrop Grumman and American Society for Quality Certified Six Sigma Black Belt (CSSBB). Toyota Kata instructor and Six Sigma Trainer for University of Tennessee Center for Industrial Services (UT-CIS), International Team Excellence Award (ITEA) Judge, Institute for Industrial Engineers (IIE) Certified Lean Facilitator, Independent Verification & Validation (IV&V) Software engineer, Internal ISO 9001 Auditor.

2:00 pm – 2:15 pm

Dr. Cindy Young, PMP, LSS MBB, CMQ-OE
Founder/CEO
CJ Young Consulting LLC
Chesapeake, Virginia USA

Founder/CEOFounder/CEO, CJ Young Consulting, LLC. The mission of CJ Young Consulting, LLC is to help organizations optimize human-centric knowledge to increase trust and support collaboration and inclusion. Working together, we can ensure the desired human-centric mindset for managing your organization’s knowledge is captured and able to be shared, transferred, and used by those in the organization who need it.

2:15 pm – 2:30 pm

Terra Vanzant Stern, PhD
LSS MBB, PMP®
CEO of Simple, Smart, Decision-Making dba SSD Global Solutions
Conifer, Colorado USA

Dr. Stern is a USAF veteran who has written several books and articles on problem solving, process improvement and leadership. Her most well-known book is Lean Six Sigma: International Standards and Global Guideline (Routledge). Her latest book by the same publisher is currently being used at Metropolitan State University: Leaner Six Sigma – Making Lean Six Sigma Easier and Adaptable to Current Workplaces. Dr. Stern’s latest work has been with Design Thinking: A Model for Process Improvement, Innovation and Invention. Additionally, Dr. Stern has published two Kindle books: LEANER Six Sigma and A Leaner Approach to Government and Public Utilities. Her book Lean and Agile Project Management went into 2nd Edition May 2020. Dr. Stern’s latest work is on Employee Engagement, She is offering training and certification as an Employee Engagement Coach.

Dr. Stern has worked with George Washington University, Baker University and CSU developing programs in the areas of practical statistics, leadership and critical thinking. Dr. Stern has performed executive coaching, facilitation and Kaizen sessions (rapid improvement events) for companies such as Tennessee Valley Authority, Southern California Edison, South Texas Project, Ahold Holding, County of Jefferson Colorado and the Denver Federal Center.

Dr. Stern’s past board positions include: Chair, ASQ Lean Enterprise Division, Strategy Chair Colorado Human Resource Association, Member at Large, Colorado Ethics Committee and Curriculum Chair for Projects with Industry (who worked placing developmentally disabled adults in the workforce community).
Pat has always been a proponent of lifelong learning. As an Adjunct at NYU, University of Connecticut, University of Bridgeport, and now College of Charleston, Pat teaches a Global Leadership class, and a Big Data Visualization class as well as the PMI PMP and ACP curriculum. She is an extensive writer about the diversity of learning opportunities, has created learning pathways using AI, and has been asked to speak at many PMI conferences, and a panelist for the Aspen Institute – Future of Work initiative. Pat sits on the Connecticut Governor’s Workforce Council, supporting a distributive learning and work initiative.

Pat has an MBA from New York University, and a Master Black Belt Certification from General Electric’s program. She has a PMI-PMP and a PMI-ACP as well as the Professional Scrum Master and SAFe’s credential. Pat has authored 2 books (Microfinance, and the Darwinism of Non-Profits) and numerous articles and has spoken at many PMI events.

Presidential Panel on the Future of IEOM Discipline

4:00 – 6:00 pm, Sunday, June 12, 2022 – Onsite Room 1

Panel Chair

Professor Abu Masud, Ph.D., P.E.
Professor Emeritus
Department of Industrial and Manufacturing Engineering
Wichita State University, Kansas, USA

Dr. Abu Masud is a professor of industrial and manufacturing engineering at Wichita State University. He has been named the Boeing Global Engineering Professor at Wichita State University. In this new post, Dr. Masud is expected to advance the College of Engineering’s strategic alliances for global enrichment and experiential learning of students as well as international research collaborations and partnerships. He received Duane and Velma Wallace Outstanding Educator Award from WSU College of Engineering. Previously he was held various positions at Wichita State including associate dean, graduate school (2008-2013), coordinator, college ABET affairs (2006-2008), associate dean, college of engineering (2004-2005), chair, industrial and manufacturing engineering department (1994-2004) and graduate coordinator of IME (1991-94, 1996-98, 2001-2004). Dr. Masud has engaged with various companies and governmental research centers including NASA Langley Research Center, VA, NASA/ASEE Summer Faculty Fellow (1991 and 1992), Boeing, Consulting Analyst, and Kuwait Institute for Scientific Research. He is member of Accreditation Review Council (2011-2014). Dr. Masud published book, book chapters, and numerous journal and conference papers. He is registered Professional Engineer at Kansas State. Dr. Masud is an IIE fellow. He received Ph.D. and M.S. in Industrial Engineering from Kansas State University, and B.S. in Mechanical Engineering from Bangladesh University of Engineering & Technology.
Hamid R. Parsaei is a Professor in the Department of Industrial and Systems Engineering at Texas A&M University (College Station) and also Professor of Mechanical Engineering at Texas A&M University at Qatar. He is a registered professional engineer (PE) in Texas, a Fellow of the Institute of Industrial and Systems Engineers (IISE), and a Fellow of the American Society for Engineering Education (ASEE). He has published over 280 articles in peer-reviewed archival journals and conference proceedings. He has also served as editor/co-editor in chief for four academic journals and eight book series. His research, in excess of $26 million, has been funded by numerous government and private institutions.

Dr. Shahram Taj joined Florida Polytechnic University in August 2016 as a professor of logistics and supply chain management. He served as the academic program coordinator of science and technology management and the department program coordinator of graduate programs in 2017. Since January 2018, he has served as the chair of the department of data science and business analytics. Taj has extensive tenure in academia. He was professor and chair of the Department of Management and Marketing at Lawrence Technological University in Michigan from 2013 to 2016. He served as The Cameron Endowed Chair of Management and Marketing at the University of St. Thomas in Houston from 2008 to 2013. Taj previously taught for more than 20 years at the University of Detroit Mercy. Taj has conducted more than 100 projects at Ford, Visteon, New Venture Gear (formerly joint venture of GM and DaimlerChrysler), GM-Holden, Baker Hughes, and Schlumberger in the United States, Germany, Australia, and Japan. The projects have covered productivity improvements, implementing lean manufacturing, and optimizing process design. In 1999, he earned the Franz Edelman Finalist Award for Achievement in Operations Research/Management Science for projects that resulted in $15.5 million capital savings and a profit increase of more than $2 billion for Ford Motor Company. Taj has served as thesis advisor-reader of more than 100 graduate students at the University of Detroit Mercy, including a doctoral thesis committee at MIT. He served as the track chair of the “Lean Manufacturing, Manufacturing Information Management, Supply Chain, and Product Development” for the SAE International in Ireland, Spain, and France. He has published 68 refereed articles in journals and proceedings of many international conferences. Recently, he published several articles on the adaptation of lean production in China, and most recently in areas of sustainability and business model innovation.

Dr. Abdelaziz Berrado
Professor and Chair, Department of Industrial Engineering
The Ecole Mohammadia d’Ingénieurs (EMI)
Rabat, Morocco

Aziz is a faculty member of Industrial Engineering at Ecole Mohammadia d'Ingenieurs(EMI), University Mohammed V, Rabat, Morocco. His research interests are in the areas of Machine Learning, Supply Chain Management, Quality, Reliability and Safety. His research work is about developing frameworks, methods and tools for systems' diagnostics, optimization and control with the aim of operational excellence. He published several papers in international scientific journals and conferences' proceedings. In addition to academic work, he is a consultant in the areas of Advanced Analytics, Supply Chain Engineering, and Quality Engineering for different Industries. He was also a senior engineer at Intel. Specialties: Advanced Analytics, Supply Chain Management, Lean Six Sigma, Data Mining and Machine Learning, Project Management, Industrial Statistics, Quality Management, Statistical Process Control, Applied Multivariate Statistics, Design and Analysis of Engineering Experiments and Response Surface Optimization, Process Modeling and Production Planning and control.
Wilkistar Otieno, Ph.D.
Associate Professor and Chair
Industrial and Manufacturing Engineering
Preparing Engineers and Computer Scientist NSF-STEM Scholarship PI. & WiscAMP Faculty Mentor
University of Wisconsin-Milwaukee
Milwaukee, WI, USA

Wilkistar Otieno is an Associate Professor and Chair of Industrial and Manufacturing Engineering at the University of Wisconsin-Milwaukee. She holds a Doctoral degree in Industrial Engineering and Masters in Statistics degree both from the University of South Florida. She earned a Bachelor’s degree in Mechanical and Production Engineering from, Moi University in Eldoret, Kenya. Her research interests include sustainable manufacturing (remanufacturing), sustainable energy (solar power generation systems performance analysis), sustainable water systems reliability and overall systems optimization. She is has interests in Science Technology Engineering and Math education, particularly for female and underrepresented minority students. She is a member of IIE, IEEE, INFORMS, SWE and QSR.

Panel on Women in Industry & Academia (WIIA) – Panel III
2:00 – 3:30 pm, Monday, June 13, 2022 – Onsite Room 1

Panel Chair
Akashita Sareen
Engineer in the Operations Planning and Engineering department
FedEx Express
United States

Akashita Sareen is an Engineer in the Operations Planning and Engineering department at FedEx Express, the world’s largest cargo airline and one of FedEx Corporation’s subsidiaries. While at FedEx, she has contributed to a diverse range of projects related to last mile delivery, digital transformation, spatial data engineering, automation and more. She is directly responsible for the planning and development of multiple sortation facilities to meet customer needs in the growing logistics and supply chain industry. She holds a Bachelor of Science in Aerospace Engineering with a minor in Sustainability from Florida Institute of Technology and a Master of Science in Engineering Management from Marshall University. She also holds a Lean Six Sigma Green Belt certification.

Panel Speakers
Sheena Butts
Associate Vice President
Surgical and Procedural Services
Lakeland Regional Health

Passionate healthcare executive with proven ability to marshal change and innovation to drive business performance and growth. Mindful of the big picture and skilled at bringing together multiple silos of executive leadership, upper and middle management, and project team members to foster collaboration and build value. Known for applying creativity, analytical rigor, and transformational leadership skills to capitalize on opportunities to maximize operational efficiency, financial performance, and clinical excellence.

Susan LeFrancois, Ph.D
Data Science
Florida Polytechnic University

Dr. Susan LeFrancois joined Florida Polytechnic University in July 2013, and has helped to design and build the curriculum, participated in outreach activities, and helped to develop industry relationships. Her background extends from work as an educator to industry jobs in the areas of quality assurance and government regulation. She has taught students science from pre-school to college. From 2008-to 2012, she was an instructor in industrial and management systems in the College of Engineering at the University of South Florida in Tampa. The program was for industry professionals and provided a graduate certificate in medical devices and regulatory affairs.

LeFrancois also served as director of quality assurance for FTSI, an industrial sterilizer of medical devices and packaging. She developed and maintained the quality system according to ISO 13485 guidelines. In addition, she was a sterilization industry consultant for the gamma and ETO medical device sterilization industries.

LeFrancois received her doctorate in pharmacology and physiology from the University of Florida in Gainesville and her bachelor’s in chemistry from the University of South Florida. Also, LeFrancois received a graduate certificate in health informatics from the University of South Florida.
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Panel Sessions  June 11-14, 2022

Panel on Industry 4.0 and Industry Solutions (Panel IV)
4:00 – 6:00 pm, Monday, June 13, 2022 – Onsite Room 1

Panel Chair

Lina Khan
Systems Engineer
Strategic Missile Defense
Lockheed Martin Space
Titusville, Florida, United States

Lina Khan serves as a Systems Engineer in the Strategic Missile Defense sector within the Lockheed Martin Space business area. Within the Aerospace and Defense (A&D) industry, she has held critical roles in program management, engineering, and operations, where she continues to pursue methods that ensure strategic growth and execution. Key initiatives include incorporating Industry 4.0 technologies such as smart factories, model-based engineering, and digital twin. Based on her industry experience, she has chosen to pursue a doctoral degree, at the University of Central Florida (UCF), with an Industry 4.0 research area. The potential contributions of this research relate to defining the critical success factors and developing a strategic framework for implementing Industry 4.0 technologies within the A&D industry. She has also earned a Bachelor of Science in Mechanical Engineering and a Master of Science in Engineering Management from UCF.

Panel Speaker I

Cintia Zuccon Buffon
Industrial Engineer
Ocean Insight
Orlando, FL, USA

Cintia Zuccon Buffon, MBA, MSIE, is an industrial engineer with 10 years of experience in the industry. She is currently pursuing her PhD in Industrial Engineering at University of Central Florida while working full-time as a Quality Engineer at Ocean Insight. Her research focuses on analyzing the voice of the customer (VOC) using artificial intelligence techniques in the Quality 4.0 era. Prior to her current position, she worked for large companies including GE Aviation, Dentsply Sirona, ZEISS and BASF. Besides industry work, she also has experience conducting research in the artificial intelligence field focused on using Natural Language Processing techniques and artificial neural networks to analyze and develop tools to estimate the volatility of financial assets in the stock market.
Panel Speaker III

Dr. Saso Krstovski, MBB
Lean Manufacturing Coach /Six Sigma Master Black Belt
Van Dyke Transmission Plant
Ford Motor Company, Michigan, USA

Dr. Saso Krstovski works for Ford Motor Company – Van Dyke Transmission Plant as a Lean Manufacturing Coach and Six-Sigma Master Black Belt. With over twenty years of service with Ford Motor Company, Dr. Krstovski has held a multitude of engineering assignments, which includes time working as a Test Engineer, Launch Test Engineer, and Electrical Control Engineer. During his time with Ford Motor Company, Dr. Krstovski has worked in several plant environments and skill teams such as Dearborn Tool & Die Plant, Information Technology, and has held front-line supervision roles managing hourly UAW-Ford production employees. This exposure to new work concepts within Ford has allowed Dr. Krstovski to amass a holistic approach to engineering. As such, Dr. Krstovski has gained an extensive understanding of the Six-Sigma methodologies. As a detail oriented and data-driven engineer, Dr. Krstovski is an invaluable contributor to Ford Motor Company. He is highly distinguished and skilled with problem identification and resolution to avoid time and cost expenditures. Dr. Krstovski recently joined Lawrence Technological University as an Adjunct Professor and is currently teaching in the Engineering Department. Dr. Krstovski’s research interests lie in the area of System Optimization. He continues to collaborate actively with researchers at several universities. Dr. Krstovski provides guidance globally to doctoral candidates on dissertation direction. He graduated from Lawrence Technological University with a Doctorate of Engineering in Manufacturing Systems (DEMS). In addition, to his doctorate degree, Dr. Krstovski has a Masters in Electrical Computer Controlled Systems and a Bachelor’s of Science in Electrical Engineering from Wayne State University. Dr. Krstovski has authored several publications and scientific articles on various engineering topics.

Panel Speaker IV

Austin Taft
Mechanical Ground Support Engineer
Strategic Missile Defense
Lockheed Martin Space
Cape Canaveral, Florida, USA

Austin Taft operates as a Mechanical Engineer in the SMD sector of the Lockheed Martin Space business segment, leveraging a Bachelor of Science in Aerospace Engineering from the Florida Institute of Technology. Within the Aerospace and Defense industry, he has provided both legacy program support and new design development through various engineering disciplines, products, and customers. A component of his current role involves championing Virtual and Augmented Reality integration into traditional work processes to find new methods of delivering technical data to key stakeholders. This technology provides stakeholders with additional product control and a redefined perspective, sparking unique conversations throughout product lifecycles to ensure deliverables are as effective and efficient as possible. As the A&D industry continues on its journey through Digital Transformation, Austin aims to find new ways in which Virtual and Augmented Reality can be value-add tools.

Panel on Global Supply Chain and Logistics (Panel V)

2:00 – 3:30 pm, Tuesday, June 14, 2022 – Onsite Room 1

Panel Chair

Alper Senol
Professor- Supply Chain Management
Miami Dade College, Miami, FL, USA

Alper Senol is an experienced process engineering manager with more than 12 years of strong working knowledge and experience in the transportation, supply chain & logistics, and manufacturing industries. Skilled in Project Management, Lean manufacturing / DMAIC, Operations Management, Quality Management, and Continuous Improvement. He is working towards a Ph.D. degree in Industrial Engineering and Management Systems at the University of Central Florida with the research subject of “Impact of Industry 4.0 on Global Supply Chain Management”. He received his Master of Science in Engineering Management and Systems Engineering from the Old Dominion University and his Bachelor of Science in Information Management System from Strayer University. Also, he is Lean Supply Chain Management and Lean Six Sigma Green Belt Certified. When Alper was in university, he was the Student President of the Industrial Engineering department and received “The student of the month” award.

Alper started his career as an Industrial Engineer at M&G Electronics in 2010. He was responsible for lean initiatives of the company along with estimating production times, staffing requirements, developing weekly labor and production forecasting for production planning, designing workstation, workflows, and assembly lines, preparing manufacturing documentation (SOP) based on ISO standards and providing necessary training for production employees and operators.
Alper joined Perry Ellis International in 2013 as an industrial engineer. In this role, he oversees and manages production, quality, supply chain, and logistics operations including need assessment, system upgrade, new process flow, and layout design, inventory management, performance metrics (KPIs), staff training, and project execution. He also supports logistics and supply chain operations while identifying and pursuing strategic opportunities to improve operational performance in terms of cost, time, quality for internal and external processes. He secured close to 1 million dollars in annual savings by implementing a freight & packaging optimization project and a quality improvement project that resulted in reducing the redo rate that was caused by production defects and breakage.

He is currently a full-time professor in Supply Chain Management department at Miami Dade College (MDC) where he teaches all subject related and engineering courses since 2020. Alper is working to build a Supply Chain Management laboratory in Miami Dade College West Campus’s makerspace with his students to provide hand-on classroom experience. Laboratory will provide end-to-end supply chain solutions within the concentration of Warehouse Management Systems that includes robotics, automation and AI. He is an advisory committee member of the Supply Chain Management board at MDC. He also helped to build Data Analytics, Procurement and Project Management concentrations for the Supply Chain Management program and concluded with the state approval.

Panel Speaker I

Dennis Tribby
Director of Portfolio Solutions
Siemens Digital Industries Software, Florida, USA

Dennis Tribby is the Director of Portfolio Solutions for Siemens Digital Industries Software as well as a PhD Candidate at the University of Central Florida under the guidance of Dr. Ahmad Elshennawy in the department of Industrial Engineering and Management Systems. His research is related to how Cost Engineering practices impact project success in Six Sigma related projects. He holds a Master’s degree in Mechanical Engineering and an MBA as well as a B.S. in Applied Mathematics from the University of Cincinnati. Dennis is also a certified Six Sigma Black Belt and a Certified Quality Engineer. He has more than 30 years of Engineering Services and Program Management experience with 25 of those years in the Aerospace and Defense industry in the areas of Product Lifecycle Management, Supplier Parts Management. Over the span of his career he has managed software deployment at Lockheed Martin for the JSF program as well as managing Siemens Industrial Machinery and Energy Services group.

Panel Speaker II

Professor Don Reimer
Director of Membership and Chapter Development – IEOM Society
President, The Small Business Strategy Group, Detroit, Michigan, USA
Adjunct Faculty – A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University, Southfield, Michigan, USA

Donald M. Reimer is an adjunct faculty at the A. Leon Linton Department of Mechanical Engineering in College of Engineering at Lawrence Tech in Southfield, Michigan. He coordinates the Certificate of Entrepreneurial Engineering Skills. Mr. Reimer holds a Bachelor of Science degree in Industrial Management from Lawrence Technological University and a Master of Arts degree in Political Science from University of Detroit/Mercy. He is a Certified Management Consultant with over 35 years of experience in working with closely-held businesses. He has taught courses in entrepreneurship, strategic management, corporate entrepreneurship and innovation for engineers. Mr. Reimer is a member of the Lawrence Tech Kam Campus Committee, Coordinator of the Lawrence Tech Innovation Encounter. He is faculty Advisor of the Collegiate Entrepreneurs’ Organization. Mr. Reimer serves as a Kern Fellow of The Kern Family Foundation, Co-Director of the Coleman Fellows Program, member of the National Collegiate Entrepreneurs’ Organization Faculty Advisory Council and is a member of the American Society of Engineering Education. He has operated his own consulting company – The Small Business Strategy Group for 23 years. He published numerous articles on small business, entrepreneurship and strategic thinking. He has received several awards and recognition by local, state and federal agencies for his work in entrepreneurship and minority business development. Mr. Reimer served as member of the Minority Economic Development Committee of New Detroit. Mr. Reimer is member of the Small Business Advisory Council of the Detroit Regional Chamber of Commerce. Mr. Reimer is a member of Advisory Board of the Milwaukee Junction Small Business Assistance Center. He is also a member of the Applied Innovation Alliance. Mr. Reimer serves as a KEEN Fellow for The Kern Family Foundation and is a member of United States Association of Small Business and Entrepreneurship.

Panel Speaker III

Mohammad Anwar Rahman, Ph.D.
Associate Professor, Manufacturing and Construction Management
Central Connecticut State University
New Britain, CT, USA

Dr. Mohammad Anwar Rahman is a faculty at the Central Connecticut State University in Manufacturing and Construction Management. He has published papers in referred journals and presented results in conferences. His research focuses on logistics, supply chain management, stochastic process and designing quality procedure. Dr. Rahman conducted several research projects with Mississippi Dept. of Education (MDE) and US Dept. of Transportation (USDOT). He has various certifications including Lean Six Sigma Green Belt (Purdue University), Lean Principles (Purdue University), Demonstrated Master Logistician (The International Society of Logistics), Malcolm Baldridge Quality Award Examiner (Louisiana Quality Foundation), and Certified Transportation & Logistics (American Society of Transport & Logistics). Dr. Rahman is affiliated with ISERC, DSI, AST&L and IEOM.
Diversity and Inclusion Panel sponsored by Ford Motor Company
4:00 – 6:00 pm, Thursday, June 14, 2022 – Onsite Room 1

Panel Chair

Wilkistar Otieno, Ph.D.
Associate Professor and Chair, Industrial and Manufacturing Engineering
Preparing Engineers and Computer Scientist NSF-STEM Scholarship PI. & WiscAMP Faculty Mentor
University of Wisconsin-Milwaukee, Milwaukee, WI, USA

Wilkistar Otieno is an Associate Professor and Chair of Industrial and Manufacturing Engineering at the University of Wisconsin-Milwaukee. She holds a Doctoral degree in Industrial Engineering and Masters in Statistics degree both from the University of South Florida. She earned a Bachelor's degree in Mechanical and Production Engineering from, Moi University in Eldoret, Kenya. Her research interests include sustainable manufacturing (remanufacturing), sustainable energy (solar power generation systems performance analysis), sustainable water systems reliability and overall systems optimization. She is has interests in Science Technology Engineering and Math education, particularly for female and underrepresented minority students. She is a member of IIE, IEEE, INFORMS, SWE and QSR.

Panel Speakers

Ms. Lourdes Matos-Rivera
Principal Systems Engineer
Northrop Grumman Aeronautics Systems, Orlando, Florida

Lourdes Matos-Rivera is a Systems Safety Engineer for Northrop Grumman Aeronautics Systems Sector, a premier provider of military aircraft, autonomous systems, aerospace structures and next-generation surveillance, strike and commercial solutions in Melbourne, Florida. Lourdes previously served as a Mechanical Design Engineer, and supported projects of ranging from mechanical design, modeling, system testing, manufacturing, and organizational process development. Prior to joining Northrop Grumman, Lourdes was a Ride and Show engineer with Universal Creative, where she provided master planning, creative development of ride products, design, project management, and research and development for various attractions. Lourdes graduated from the University of Central Florida (UCF) in 2016 with a Bachelor of Science in Mechanical Engineering and a Certificate in Engineering Leadership. She is currently pursuing a Master of Science in Engineering Management at UCF. Lourdes is passionate about Diversity, Equity and Inclusion, and has made a big impact in this area through her leadership in the NG Hispanic Employee Resource Group ADELANTE, where she is the local chapter chair. Additionally, Lourdes holds a key leadership position within the trailblazing Hijuelas Initiative, where she is a program developer. Lourdes is a champion for STEM education and outreach. She mentors and coaches middle school, high school, and college students through her involvement in the Great Minds in STEM College Bowl, TRYENGINEERING, and the Brevard County Schools’ Innovation Games.

Yazeli Cruz
Medallia Expert Services / Latinx@Medallia Lead
Medallia, Washington, DC, USA

Cruz is the current Latin America Medallia Expert Services Senior Analyst, where she coaches and supports sub-contracting partners that roll up to over forty accounts and a hundred Medallia software users. She is also the Latinx@Medallia employee resource group lead (ERG). The Latinx@Medallia is an affinity group for employees of Latin American descent and allies. She obtained her bachelor's and master's in Industrial engineering from the University of Puerto Rico at Mayaguez (UPRM). She started her work in diversity and inclusion in 2009 as part of the Industrial and mechanical engineering student mentor association also in UPRM. In 2012, she joined the Applied Optimization Group led by Prof. Mauricio Cabrera-Rios and Prof. Clara Isaza. She participated in research to unlock information about the origins of certain illnesses such as lung cancer and Alzheimer's Disease. Thanks to her work in the Applied Optimization Group, she published a paper in the Journal of Alzheimer's Disease titled: "A Selection of Important Genes and Their Correlated Behavior in Alzheimer's Disease." In addition, she was the only student chosen from Puerto Rico in 2013 to be part of INROADS. This non-profit organization creates pathways to careers for ethnically diverse high school and college students across the United States. She participated in co-ops in both Rockwell Aerospace and Amgen. She has won various awards, including INROADS 2014 Golf scholarship, DiscoverE's 2016 New Face of Engineering: College Edition, SACNAS 2016 travel award, and AAAS 2017 Joshua Neimark Travel award recipient. In 2017 she co-founded the grassroots organization called "Copa Solidaria", which aims to help underprivileged people who menstruate. After graduating with her master's in 2018, she became a Technical Analyst for Accenture Federal Services plus service as one of the co-leads of the community outreach committee of the Washington D.C. chapter of Accenture's Hispanic ERG. In 2020, she joined Medallia as a technical senior analyst and liaison between financial services accounts in Latin America. She also became the leader of the Latinx@Medallia ERG. Yazeli continues to service her community by mentoring the next generation of tech employees and supporting Latinx organizations throughout the Americas.

Panel Speaker IV
Dr. Charles Winfred Davis Jr., Professor at Valencia College since 2003 teaching various courses in Pre-Engineering, Mathematics courses, Mathematics for Engineering Technology, Quality Assurance and Test Methods, Engineering Management, Communications, and Ethics and Probability and Statistics for Engineering. Over 27 years of extensive experience in both public and private sector consisting of Project Management, Leadership and Quality Assurance. Six Sigma Yellow Belt Certification with American Society of Quality and Dare to Lead Certification based on the research of Dr. Brené Brown. Earned bachelor’s degree in design engineering, Master’s degree in Industrial Engineering with a concentration in Engineering Management and a Ph.D. in Industrial Engineering from the University of Central Florida. Dr. Davis has several related professional accomplishments and community involvement which includes Chair Florida Engineering Society (FES) Annual Conference and Florida Professional Engineers in Industry (FPEI), Co-Chair – Florida Engineers in Education, FES Engineering Faculty of the Year (2014, 2015, 2016, 2019 & 2021), FPEI Industry Engineer of the Year (2016), FES Outstanding Service to the Engineering Profession (2021), Technical Director – National Society of Black Engineers (NSBE) Process Improvement Special Interest Group (PI SIG), Members of Tau Beta Pi Honor Society and Golden Key International Honor Society, authored and published 2 papers in Institute of Industrial Systems and Engineers (2018 & 2021), co-authored and published a paper in the Military Metaverse MOSES (2015) and co-authored a paper in the Journal on Systematics, Cybernetics and Informatics (2016).

Professor Donald M. Reimer
Director of Membership and Chapter Development – IEOM Society
President, The Small Business Strategy Group, Detroit, Michigan, USA
Adjunct Faculty – A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering
Lawrence Technological University, Southfield, Michigan, USA

Submissions Received from Countries and Territories

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7th North American Conference

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Conference Committee

Conference Chairs
Dr. Shahram Taj, Chair and Professor, Department of Data Science & Business Analytics, Florida Polytechnic University, USA
Dr. Ahmad Elshennawy, Professor, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, FL, USA
Dr. Ahmad Ali, Associate Professor and Director of Industrial Engineering Program, Lawrence Technological University, Michigan, USA

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Dr. Reinaldo Sanchez-Arias, Assistant Chair Department of Data Science and Business Analytics, Assistant Professor of Data Science, Florida Polytechnic University, Florida, USA
Dr. Doga Demirel, Assistant Professor and Assistant Chair of the Computer Science Department at Florida Polytechnic University, Florida, USA

Industry Chair
Mr. Aaron Rubel, Head of Maintenance Programs Development and Intellectual Property Focal Point, Airbus Mobile Engineering Center, Airbus Americas, Inc., Mobile, Alabama, USA

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Professor Don Reimer, Adjunct Professor, LTU, MI, USA

Women in Industry and Academia Chairs
Dr. Wilkistar Otieno, Associate Professor and Chair, Department of Industrial and Manufacturing Engineering, University of Wisconsin – Milwaukee, USA

Industry Solutions Chair
Foad Hosseinkhani, Director of Quality Assurance, Performance and Business Improvement, Amor Health Services, Inc., Brownsville, Texas, USA

Global Engineering Education Chairs
Dr. Abu Masud, Wichita State University and Dr. Hamid Parsaei, Texas A&M University, College Station

8th NA Conference Chair (2023 Houston)
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Automotive Manufacturing Systems
Dr S A Mohan Krishna, VidyaVardhaka College of Engineering

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Dr. Abdulaziz Ahmed, Program Director, Univ. of Minnesota Crookston, USA

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Dr. Ruslan Ziaditnov, Keimyung Univ., South Korea

Construction Management
Dr. Rakesh Ramnath, The University of the West Indies, St Augustine Campus, West Indies

Cyber Security
Dr. Jing Hou, FL Poly

Data Analytics / Business Analytics
Dr. Sanchez-Arias, FL Poly

Decision Sciences
Ing. Johanna Trujillo Diaz, Escuela Colombiana de Ingeniería Julio Garavito, Bogotá, D.C., Colombia

Design and Analysis
Dr. Ahsanal Kariim, Ford Motor Company

Defense and Aviation
Dr. Farshid Azadian, Embry-Riddle Aeronautical University, Daytona Beach, Florida

Energy
Dr. Mohammad Ashraf Hossain Sadi, University of Central Missouri, Kansas City, Missouri

Engineering Education
Dr. Daniel M. Fergusson, Engineering Education, Purdue University, West Lafayette, Indiana

Engineering Management
Dr. Luz Maria Valdez de la Rosa, Universidad de Monterrey, Monterrey, Mexico

Environmental Systems Engineering
Dr. Ali ElKamel, University of Waterloo, Canada

Financial Engineering
Cesar Acosta, University of Southern California, Los Angeles, California

Healthcare Operations and Services
Dr. Joonyup Eun, Korea University, South Korea

Vahab Vahdat, Northeastern University, USA

Human Factors and Ergonomics
Jafri Bin Mohd Rohani PKM, UTM

Industrial Services
Dr. Joseph Ogundu, Emerald Global Consulting, Southfield, Michigan

Information Systems and Management
Dr. Farouq Alhourani, University of Tampa, Florida

Innovation and Entrepreneurship
Tarun Mohan Lal, Vice President, Analytics and Solutions/CAO Vice President, Analytics and Solutions/CAO, Atrium Health Navicent, Georgia

Inventory Management
Niamat Hossain, Arkansas State University

Lean Six Sigma
Dr. Saso Krestovski, Ford Motor Company, Michigan, USA

Logistics
Niamat Hossain, Arkansas State University

Manufacturing
Dr. AMM Nazmul Ahsan, Western Carolina University, Cullowhee, NC, USA

Mathematical Modeling/Heuristics
Dr. Aidin Delgoshaei, University of Kharazmi, Iran

Modeling and Simulation
Dr. Mohammad Dethghani, Northeastern University, Boston, Massachusetts
Dr. Ali ElKamel, University of Waterloo, Canada

Operations Management
Dr. Jim Mennie, FL Poly

Operations Research
Dr. Qipeng Phil Zheng, University of Central Florida, Orlando, USA
Dr. Azadeh MaroufMashat, University of Waterloo, Canada

Optimization
Dr. Mahdi Fathi, University of North Texas, Denton, Texas, USA

Product Lifecycle Management (PLM)
Md Tanbiruj Jaman, AGCO Corp., Hesston, Kansas

Production Planning and Management
Santosh Gadagunti, Quality Engineer at Peterson Spring, Southfield, Michigan

Project Management
Dr. Abdussalam Shihabi, Coventry University

Quality and Reliability
Dr. Seyed A. Niknam, Western New England University, Springfield, MA

Supply Chain Management
Aixi Zhou is Professor and Chair of the Department of Applied Engineering Technology at North Carolina A&T State University (NCAT). In his role, he is leading the department with a mission to prepare students for success in transforming society through innovation and technology leadership.

Prior to joining NCAT, Dr. Zhou held positions at the University of North Carolina at Charlotte, Virginia Polytechnic Institute and State University, India. Dr. Badar has published one edited book, two book chapters and more than 80 articles in refereed journals and proceedings in the areas of quality, reliability and maintenance, lean six sigma, economic analysis, coordinate metrology, health care, energy system design, and supply chain. He is a member of IISE, IEOM, ASEM, and ASEE.
materials and structures, manufacturing, and engineering education. He has been the Principal Investigator (PI) or co-PI for over 20 funded research projects. Dr. Zhou is the author or co-author of more than 100 technical publications and the author of textbooks Applied Engineering Experiments and Advanced Engineering Experiments. He is a Fellow of SFPE. Dr. Zhou is a licensed Professional Engineer. He serves as a Commissioner in the Engineering Accreditation Commission at ABET.

Global Engineering Education III
8:00 – 9:45 am – Room 1
Presidential Panel on the Future of IEOM Discipline
Chair: Dr. Abu Masud
Co-Chair: Dr. Hamid Parsaei

| Professor Abu Masud, Ph.D., P.E. |
| Department of Industrial and Manufacturing Engineering |
| Wichita State University, Kansas, USA |

| Professor Hamid Parsaei, Ph.D., PE |
| Professor, Department of Industrial and Systems Engineering |
| Interim Director, College of Engineering Accreditation and Assessment |
| Texas A&M University, College Station, Texas, USA |

| Dr. Shahram Taj |
| Chair and Professor, Department of Data Science & Business Analytics |
| Florida Polytechnic University |
| Lakeland, Florida, USA |

| Dr. Wilkistar Otieno |
| Associate Professor and Chair |
| Industrial and Manufacturing Engineering |
| Faculty Mentor of Preparing Engineers and Computer Scientist NSF-STEM Scholarship PI. & WiscAMP |
| University of Wisconsin-Milwaukee |
| Milwaukee, WI, USA |

| Dr. Waldemar Karwowski |
| Pegasus Professor and Chairman |
| Department of Industrial Engineering and Management Systems |
| University of Central Florida |
| Orlando, Florida, USA |

| Dr. Abdelaziz Berrado |
| Professor and Chair, Department of Industrial Engineering |
| The Ecole Mohammadia d’Ingénieurs (EMI) |
| Rabat, Morocco |

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Mennie has more than 35 years of business experience. Before relocating to Florida, he owned his own family businesses and worked for large companies in the New York metro area. He has extensive experience in improving a broad range of business operations working with a plethora of research scientists engaged in phosphate and industrial research. Mennie’s research interests focus on resolving long-standing business challenges including establishing a domestic supply chain of rare earth elements (REE’s), eliminating environmental liabilities through destacking phosphogypsum (PG), increasing mineral beneficiation, and developing more efficient utilization of fertilizers in agriculture.

Mennie has more than 35 years of business experience. Before relocating to Florida, he owned his own family businesses and worked for large companies in the New York metro area. He has extensive experience in improving a broad range of business operations working with a plethora of engineering and technology project management, supply chain risk management, introduction to operations and supply chain management, strategic management, and entrepreneurship opportunity analysis.

In addition to his academic responsibilities, in 2019, Mennie was appointed the business director of the Florida Industrial and Phosphate Research Institute (FIPR Institute) with the expanded purpose of strengthening FIPR’s finances and developing and implementing a new strategic plan. The FIPR Institute has been in existence for more than 40 years and is the largest repository of phosphate research in the world. He leads a team of research scientists engaged in phosphate and industrial research. Mennie’s research interests focus on resolving long-standing business challenges including establishing a domestic supply chain of rare earth elements (REE’s), eliminating environmental liabilities through destacking phosphogypsum (PG), increasing mineral beneficiation, and developing more efficient utilization of fertilizers in agriculture.

Mennie has more than 35 years of business experience. Before relocating to Florida, he owned his own family businesses and worked for large companies in the New York metro area. He has extensive experience in improving a broad range of business operations working with a plethora of Fortune 500 companies.

Dr. M. Ilhan Akbas is an Assistant Professor at the Electrical Engineering and Computer Science Department of Embry-Riddle Aeronautical University. He received his PhD degree in Computer Engineering from the University of Central Florida. He has research interests in connected and autonomous cyber-physical systems, internet of things, modeling and simulation. He serves on several editorial boards and program committees of prestigious ACM and IEEE journals and conferences. His research has been funded through grants from National Science of Foundation, Florida Center for Cybersecurity, as well as industry.

Dr. Akbas is the author of more than 50 articles, which have appeared in prestigious venues such as IEEE Transactions, Society of Automotive Engineers (SAE) edge reports and flagship conferences of IEEE and ACM. He serves as an Editor for MDPI Journal of Sensors. The research work of Dr. Akbas on developing novel solutions for the testing and validation of autonomous vehicles has been covered by media, including Spectrum Bay News 9, Tampa Bay Business Journal and News 13. He gave invited talks about this research project at Sao Paulo, Brazil in 2018 and 2019. Dr. Akbas has industry experience in defense industry that started when he was a senior in college. He participated in multinational defense industry projects and worked on the standardization of tactical telecommunication systems. Before joining academia as a professor, he became a Cisco Certified Network Associate and also served as a database analyst at the Institute for Simulation and Training (IST), University of Central Florida. Dr. Akbas served on the faculty of Florida Polytechnic University from 2016 to 2019, where he was one of the leading faculty to found the Advanced Mobility Institute. He taught at every level of computer science/engineering curriculum, served as the accreditation coordinator and participated in the development of two new concentrations “Software Engineering” for computer science department and “Intelligent Mobility” for data science department. Dr. Akbas is a member of IEEE, ACM and Complex Systems Society.
Ala’ J. Alnaser, Ph.D.
Applied Mathematics
Florida Polytechnic University
Lakeland, Florida, USA

Dr. Ala Alnaser is an ASSISTANT PROFESSOR in applied mathematics at Florida Polytechnic University. Before coming to Florida Poly, Dr. Ala’ Jamil Alnaser served as an assistant professor of mathematics at Trine University, Indiana, from January 2010 to May 2015 where his duties mainly involved teaching and service. He often utilizes instructional technologies that include MyMathLab, WebAssign, MATLAB and scientific graphing calculators. Alnaser completed his doctoral dissertation in the area of algebraic number theory and developing new methods for finding upper bounds for Waring's number over the rational integers. From 2003 to 2009, he worked as a graduate teaching assistant at Kansas State University, where he taught many courses including College Algebra, Calculus II and III, Linear Algebra and Applied Matrix Theory. Dr. Alnaser received Robert Andrew and Anne Ewing Smith Excellence in Teaching Award in Arts and Sciences for academic year 2011-12, Hostinsky Outstanding Graduate Teaching Assistant in Academics Award and KSU Presidential Award for Excellence in Undergraduate Teaching nomination. Dr. Alnaser received Ph.D. in Mathematics from Kansas State University, M.S. in Mathematics from Kansas State University and B.S. in Mathematics and Statistics, Jordan University of Science and Technology. He is a member of American Mathematical Society and Advanced Mobility Institute, Florida Poly. Dr. Alnaser serves as a Chair of the text selection committee for mathematics courses, Florida Poly and Chair of the mathematics hiring committee, Florida Poly.

Amy Augustyniak
Senior Manager, Supply Chain Analytics
SaddleCreek Logistics
Lakeland, Florida, USA

Industry Solutions and Industry 4.0: II
June 13, Monday, 2:00 – 3:45 pm, Room 2 (Onsite)
Session Chair:

Dr. Ahmed Mohamed
Director of Solutions Engineering
Orlando Health, FL, USA

Dr. Ahmed Mohamed is currently a Director of Solutions Engineering at Orlando Health with 25+ years of technical and management experience in Information Technology and Healthcare. Additional experience involved teaching graduate courses at Webster University in Orlando Campus as an adjunct instructor. He received his PhD and MS degree in Industrial Engineering from the University of Central Florida, Department of Industrial Engineering and Management Systems (IEMS). He also earned MS degree from City College of New York in 1994 and his BS degree from Alexandria University, Egypt in 1990, all in Electrical Engineering. He holds several certifications including PMP, CLSSBB, CSM, ITIL V3, and a Graduate Certificate for Quality Assurance. His focus is on healthcare process improvements by utilizing information technology and data analytics.

Foad H Khanli
Director of Quality Assurance, Performance and Business Improvement
Amor Health Services, Inc.
Brownsville, Texas, USA

Mr. Hosseinkhanli is Director of Quality Assurance, Performance and Business Improvement Amor Health Services, Inc. in Brownsville Texas USA. He was General Manager of Almana Trading in Doha Qatar Middle East and responsible for all aspects in creation and implementing of successful growth of new market development and turn-key operation for various products. Mr. Hosseinkhanli was involved with financial negotiation with national and international banking, corporation, private sources and trading organization. Volvo International Development Corporation, Gothenburg Sweden, Marketing Director For The Middle Eastern Countries, UAE, Saudi Arabia, Bahrain, Turkey and Iran. Negotiated and established exclusive franchise agreement and turn-key operation. Did market analysis and feasibility
Arman Sargolzaei, Ph.D.
Mechanical Engineering, Resilient, Autonomous, Networked Control Systems
Tennessee Tech University
Cookeville, Tennessee, USA

Dr. Arman Sargolzaei joined the ME Department in Fall 2020 as an Assistant Professor. His expertise is in applying linear and nonlinear control methods, machine learning, and artificial intelligence to the field of Networked Control Systems. His mission is to enhance the quality of life for people, with assuring the safety, security, and privacy concerns through extensive collaboration among multi-disciplinary fields. His research on the security of Networked Control Systems (NCSs) and resiliency of Multi-agent systems, particularly his doctoral dissertations entitled “Control of Multi-Agent Systems Under Cyberattack” and “Time-Delay Switch Attack on Networked Control Systems, Effects, and Countermeasures,” combined with the knowledge of control theory, system identification, mathematics, and statistics carried significant practical implications in better understanding the pathways of faults, failure, and attack detection and compensation for NCSs. He followed his vision in securing NCSs by leading several funded projects. He was recognized with the honor of the “Faculty Research Excellence Award” for two consecutive years and served as the director of the Advanced Mobility Institute (AMI) and an Assistant Professor of Electrical Engineering at Florida Polytechnic University before coming to Tech. He has three years of industrial experience as a system development engineer and supervisor of the internship program at PLC International Inc., a multinational corporation specializing in telecommunications for electrical substations and smart grid applications. In this position, he was a lead engineer for a product called Rugged Smart Machine-to-Machine platform, which received the best of show innovation award at ITEXPO for two consecutive years. He believes in the importance of interdisciplinary collaboration as the key to success. He served as a chair for several university committees such as program assessment committees and faculty hiring committees. He was also the program coordinator for the international fund-raising events for improving the educational and training on the security of control systems.

Mike Turner
Global Manager for Design for Six Sigma (DFSS) in Operational Excellence (OpEx)
General Motors Company
Warren, Michigan
USA

Title of Presentation: Start-Up of a Six Sigma Program: People, Process and Predicaments

Mike Turner is a certified Design for Six Sigma (DFSS) Master Black Belt and Global Manager in Operational Excellence (OpEx). He holds a BS and MS in Engineering and BA in English Literature. Mike has supported and led start-ups of DFSS and OpEx programs for the last 13 years at large, multinational companies. He currently is responsible for the global DFSS program at General Motors, LLC. His team is responsible for the DFSS strategy, training, coaching and mentoring of 30,000 employees.
4:25 pm – 4:50 pm

**Akashita Sareen**  
Engineer in the Operations Planning and Engineering department  
FedEx Express, United States

Topic Description: E-commerce is expected to grow at an average of 47% in the next five years globally. This calls for optimizing last mile delivery operations from a sortation hub to destination using spatial analysis and operational productivity while also ensuring the least impact on the environment. Akashita Sareen is an Engineer in the Operations Planning and Engineering department at FedEx Express, the world’s largest cargo airline and one of FedEx Corporation’s subsidiaries. While at FedEx, she has contributed to a diverse range of projects related to last mile delivery, digital transformation, spatial data engineering, automation and more. She is directly responsible for the planning and development of multiple sortation facilities to meet customer needs in the growing logistics and supply chain industry. She holds a Bachelor of Science in Aerospace Engineering with a minor in Sustainability from Florida Institute of Technology and a Master of Science in Engineering Management from Marshall University. She also holds a Lean Six Sigma Green Belt certification.

4:50 pm – 5:15 pm

**Thomas Jones**  
Ph.D. candidate at UCF  
Department of Industrial and Systems Engineering  
University of Central Florida  
Orlando, FL, USA

Thomas Jones is a PhD candidate at UCF in the department of Industrial and Systems Engineering, and he holds B.S. and M.S. degrees in Industrial Engineering from Wichita State University. His research focus is on Quality 4.0 in manufacturing environments with an interest in how company culture and quality systems influence digital transformations.

5:15 pm – 5:40 pm

**Aaron Rubel, M.S.E.M.**  
Head of Aircraft Maintenance Programs Development  
Intellectual Property Focal Point  
Airbus Americas, Inc.  
Mobile, Alabama Engineering Center  
Mobile, AL 36615, USA

Aaron Rubel is Head of Aircraft Maintenance Programs Development at the Mobile, Alabama Engineering Center of Airbus Americas. He is a certified Lean Six Sigma Black Belt and has earned patented inventions. Aaron has over 30 years of combined professional aerospace and automotive experience in areas of engineering, design, risk analysis, problem solving, manufacturing, and leadership. Mr. Rubel earned a M.S. in Engineering Management from the University of Tennessee at Chattanooga (UTC), a B.S. in Engineering Technology from Lawrence Technological University (LTU), and an Associate of Applied Science from Macomb Community College. Mr. Rubel’s honors include the Dr. Ron Cox Graduate Engineering Management Student Award given by UTC, and he was inducted into the LTU College of Engineering Hall of Fame. Service in the community is important to Aaron. He served on a Mobile (Alabama) Area Education Foundation strategic planning committee for science, technology, engineering, and mathematics (STEM), and for three years was the strategic planning committee chair and voting member on a local school board.
9th IEOM Global Supply Chain and Logistics

DISTINGUISHED SPEAKERS

Global Supply Chain and Logistics - I
8:00 – 9:45 am, Tuesday, July, 14, 2021 – Room 2 (onsite)
Session Chair: Dr. Ahad Ali

8:00 - 8:30 am (Tuesday, June 14)

Dr. Ahad Ali
Associate Professor
Director of Bachelor of Science in Industrial Engineering
Director, Master of Science in Industrial Engineering
Director of Smart Manufacturing and Lean Systems Research Group
A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering
Lawrence Technological University
Southfield, Michigan, USA

Dr. Ahad Ali is an Associate Professor and Director of Bachelor of Science in Industrial Engineering and Master of Science in Industrial Engineering in the A. Leon Linton Department of Mechanical Engineering at the Lawrence Technological University, Michigan. Dr. Ali is the Director of Smart Manufacturing and Lean Systems Research Group. He earned B.S. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh, Masters in Systems and Engineering Management from Nanyang Technological University, Singapore and Ph.D. in Industrial Engineering from University of Wisconsin-Milwaukee. Dr. Ali is the Executive Director of IEOM Society and Conference Chair of the Sixth International Conference on Industrial Engineering and operations Management, Kuala Lumpur 2016. He advised six doctorate students in Doctor of Engineering in Manufacturing Systems. Dr. Ali has published journal and conference papers. He was past President of IIE Lean Division. Dr Ali has done research projects with Chrysler, Ford, DTE Energy, Delphi Automotive System, GE Medical Systems, Harley-Davidson Motor Company, International Truck and Engine Corporation (ITEC), National/Panasonic Electronics, and Rockwell Automation. His research interests include quality, reliability, six sigma, manufacturing, simulation, optimization, scheduling, maintenance, e-manufacturing, lean, CAE and GD&T and. He is a member of ASEE, IEEE, IEOM, INFORMS, and SME.

Global Supply Chain and Logistics – II
Panel
2:00 – 3:45 pm, Tuesday, July, 14, 2021 – Room 2 (onsite)

Panel Chair

Alper Senol
Professor- Supply Chain Management- Miami Dade College
Process Engineering Manager
Ph.D. candidate – Industrial Engineering and Management Systems
University of Central Florida
Orlando, Florida, USA

Panel Speakers

| Dennis Tribby – Director of Portfolio Solutions Siemens Digital Industries Software Florida, USA | Mohammad Anwar Rahman, Ph.D. Associate Professor, Manufacturing and Construction Management Central Connecticut State University New Britain, CT, USA | Professor Don Reimer Director of Membership and Chapter Development – IEOM Society Adjunct Faculty – A. Leon Linton Department of Mechanical Engineering, Lawrence Technological University, Southfield, Michigan, USA |

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7th North American Conference
Alper Senol is an experienced process engineering manager with more than 12 years of strong working knowledge and experience in the transportation, supply chain & logistics, and manufacturing industries. Skilled in Project Management, Lean manufacturing / DMAIC, Operations Management, Quality Management, and Continuous Improvement. He is working towards a Ph.D. degree in Industrial Engineering and Management Systems at the University of Central Florida with the research subject of “Impact of Industry 4.0 on Global Supply Chain Management”. He received his Master of Science in Engineering Management and Systems Engineering from the Old Dominion University and his Bachelor of Science in Information Management System from Strayer University. Also, he is Lean Supply Chain Management and Lean Six Sigma Green Belt Certified. When Alper was in university, he was the Student President of the Industrial Engineering department and received “The student of the month” award.

Alper started his career as an Industrial Engineer at M&G Electronics in 2010. He was responsible for lean initiatives of the company along with estimating production times, staffing requirements, developing weekly labor and production forecasting for production planning, designing workstation, workflows, and assembly lines, preparing manufacturing documentation (SOP) based on ISO standards and providing necessary training for production employees and operators.

Alper joined Perry Ellis International in 2013 as an industrial engineer. In this role, he has involved various sides of the supply chain management and warehouse management systems. He has executed two major WMS projects during his employment and received an outstanding achievement award representing the engineering department for executing an overseas WMS project successfully in 2014. His expertise includes implementing strategic initiatives and projects; overseeing WMS and WLM processes; and leading diverse staff to maximize productivity, efficiency, and overall business performance. Through his experience, he has become adept at ensuring alignment with organizational goals and requirements while facilitating streamlined transportation, logistics, and supply chain operations and building strategic relationships with internal and external stakeholders.

Alper worked as a process engineering manager at the Bel USA in Miami. He oversees and manages production, quality, supply chain, and logistics operations including need assessment, system upgrade, new process flow, and layout design, inventory management, performance metrics (KPIs), staff training, and project execution. He also supports logistics and supply chain operations while identifying and pursuing strategic opportunities to improve operational performance in terms of cost, time, quality for internal and external processes. He secured close to 1 million dollars in annual savings by implementing a freight & packaging optimization project and a quality improvement project that resulted in reducing the redo rate that was caused by production defects and breakage.

He is currently a full-time professor in Supply Chain Management department at Miami Dade College (MDC) where he teaches all subject related and engineering courses since 2020. Alper is working to build a Supply Chain Management laboratory in Miami Dade College West Campus’s makerspace with his students to provide hand-on classroom experience. Laboratory will provide end-to-end supply chain solutions within the concentration of Warehouse Management Systems that includes robotics, automation and AI. He is an advisory committee member of the Supply Chain Management board at MDC. He also helped to build Data Analytics, Procurement and Project Management concentrations for the Supply Chain Management program and concluded with the state approval.

Thomas Jones is a PhD candidate at UCF in the department of Industrial and Systems Engineering and he holds B.S. and M.S. degrees in Industrial Engineering from Wichita State University. His research focuses on Quality 4.0 in manufacturing environments with an interest in how company culture and quality systems influence digital transformations.

Cintia Zuccon Buffon, MBA, MSIE, is an industrial engineer with 10 years of experience in the industry. She is currently pursuing her PhD in Industrial Engineering at University of Central Florida while working full-time as a Quality Engineer at Ocean Insight. Her research focuses on analyzing the voice of the customer (VOC) using artificial intelligence techniques in the Quality 4.0 era. Prior to her current position, she worked for large companies including GE Aviation, Dentsply Sirona, ZEISS and BASF. Besides industry work, she also has experience conducting research in the artificial intelligence field focused on using Natural Language Processing techniques and artificial neural networks to analyze and develop tools to estimate the volatility of financial assets in the stock market.
### Parallel Sessions

**All Times are in USA ET (Orlando Time)**

**Saturday, June 11, 2022 (Virtual)**

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<th>Time</th>
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<td>6:00 – 7:45 am</td>
<td>Undergraduate Research Competition</td>
<td>Graduate Paper Competition</td>
<td>High School Competition</td>
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<td>8:00 – 9:45 am</td>
<td>Undergraduate Paper Competition</td>
<td>Graduate Paper Competition</td>
<td>MS Thesis Competition</td>
<td>Business Management</td>
<td>SCM</td>
<td>TM</td>
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<td>10:00 – 11:45 am</td>
<td>Undergraduate Paper Competition</td>
<td>PhD Dissertation Competition</td>
<td>HF &amp; LSS Competition</td>
<td>Competitions</td>
<td>SCM</td>
<td>Innovation</td>
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<tr>
<td>12:00 – 1:45 pm</td>
<td>Undergraduate Paper Competition</td>
<td>Covid Competition</td>
<td>Artificial Intelligence</td>
<td>Sustainability</td>
<td>Six Sigma</td>
<td>ORSCM</td>
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<tr>
<td>2:00 – 3:45 pm</td>
<td>Undergraduate Paper Competition</td>
<td>High School Competition</td>
<td>Industry 4.0</td>
<td>OR</td>
<td>SCM</td>
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<tr>
<td>4:00 – 5:45 pm</td>
<td>Undergraduate Paper Competition</td>
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**Sunday, June 12, 2022 (Onsite at Holiday Inn & Suites Across from Universal Orlando)**

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<tr>
<td>6:00</td>
<td>HF (Virtual)</td>
<td>Data Analytics (Virtual)</td>
<td>BM (Virtual)</td>
<td>BM</td>
<td>Sustainability</td>
<td>OM</td>
<td>Lean &amp; Operations</td>
</tr>
<tr>
<td>8:00</td>
<td>Plenary I</td>
<td>GEE I Competitions (Onsite)</td>
<td>HF and Healthcare</td>
<td>BM</td>
<td>OM</td>
<td>Case Studies</td>
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<td>10:00</td>
<td>Morning Networking Coffee Break</td>
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<tr>
<td>10:20</td>
<td>Keynote I (Opening Keynote): Dr. Randy Avent, President, Florida Polytechnic University, Florida, USA - Ballroom (Room 1)</td>
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<tr>
<td>11:00</td>
<td>Keynote II: Dr. Kay M. Stanney, CEO and Founder, Design Interactive, Inc. and Member, National Academy of Engineering (NAE), Orlando, Florida, USA - Room 1</td>
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<td>11:40</td>
<td>Keynote III: Professor Alex Frino, Deputy Vice-Chancellor (Global Strategy), University of Wollongong, Wollongong, NSW, Australia - Ballroom (Room 1)</td>
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<td>12:20</td>
<td>Keynote IV: Ms. Jessica Ascough, Chief Software Architect, AI Solutions Architect, Data Scientist, L3Harris Technologies, Florida, USA - Ballroom (Room 1)</td>
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<tr>
<td>2:00</td>
<td>Lean Six Sigma Panel</td>
<td>GEE II: TM Higher Edu Case studies</td>
<td>Engineering Education</td>
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<td>3:45</td>
<td>Afternoon Networking Coffee Break</td>
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<td>4:00</td>
<td>Presidential Panel on the Future of the IEOM Discipline – Room 1</td>
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**Monday, June 13, 2022 (Onsite at Holiday Inn & Suites Across from Universal Orlando)**

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<tr>
<td>6:00</td>
<td>Innovation</td>
<td>Entrepreneurship</td>
<td>Case Studies (virtual)</td>
<td>Data Analytics</td>
<td>Business Management</td>
<td>Data Analytics</td>
<td>BM</td>
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<tr>
<td>8:00</td>
<td>Plenary II</td>
<td>Industry Solutions I</td>
<td>OM (Onsite)</td>
<td>e-Business</td>
<td>Case Studies</td>
<td>OR</td>
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<tr>
<td>9:30</td>
<td>Morning Networking Coffee Break</td>
<td>Foyer Area of Holiday Inn &amp; Suites Across from Universal Orlando</td>
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<tr>
<td>10:00</td>
<td>Conference Chair Remarks – Ballroom (Room 1)</td>
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<td>10:20</td>
<td>Keynote V: Dr. Regiane Reva Romano, Professor and Head of Smart Cities at Facens, Advisor to Brazil’s Ministry of Science, Technology, Innovation and Communication, Brazil – Ballroom (Room 1)</td>
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<td>11:00</td>
<td>Keynote VI: H.D. Polumbo Jr., Maj Gen USAF (retired), Founding Partner and Senior Consultant, Two Blue Aces LLC, Winter Haven, Florida, USA – Room 1</td>
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<td>11:40</td>
<td>Keynote VII: Dr. Duane Davis, Chief Physician Executive AdventHealth Institutes, Orlando, Florida, USA – Ballroom (Room 1)</td>
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<td>12:20</td>
<td>Keynote VIII: Ms. Donna Syster, Senior Vice President and CIO, Saddle Creek Logistics Services, Florida, United States – Ballroom (Room 1)</td>
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<tr>
<td>2:00</td>
<td>WIIA Panel</td>
<td>Industry Solutions II</td>
<td>OR (Onsite)</td>
<td>Data Analytics</td>
<td>OM</td>
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<td>3:45</td>
<td>Afternoon Networking Coffee Break</td>
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<tr>
<td>4:00</td>
<td>Industry 4.0 Panel</td>
<td>Industry Solutions III</td>
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**Tuesday, June 14, 2022 (Onsite at Holiday Inn & Suites Across from Universal Orlando)**

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<tr>
<td>6:00</td>
<td>Entrepreneurship (virtual)</td>
<td>e-Business (virtual)</td>
<td>Smart Systems (virtual)</td>
<td>IoT</td>
<td>Case studies</td>
<td>EM</td>
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<tr>
<td>6:00</td>
<td>Plenary III (onsite)</td>
<td>GSCM (onsite)</td>
<td>Simulation (Onsite)</td>
<td>Smart Mobility</td>
<td>Case Study</td>
<td>Innovation</td>
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<td>9:30</td>
<td>Morning Networking Coffee Break</td>
<td>Foyer Area of Holiday Inn &amp; Suites Across from Universal Orlando</td>
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<td>10:00</td>
<td>Conference Chair Remarks – Ballroom (Room 1)</td>
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<td>10:20</td>
<td>Keynote IX: Dr. Mary Vollario, Professor and Chair, Department of Mechanical Engineering and Environmental Engineering, Florida Polytechnic University – Room 1</td>
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<td>11:00</td>
<td>Keynote X: Dr. Mansoorah Mollaghasemi, Associate Professor, Industrial Engineering &amp; Management Systems Department, University of Central Florida – Room 1</td>
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<td>11:40</td>
<td>Keynote XI: Dr. Ahmed Kamel, Senior Key Expert, Additive Manufacturing and Innovation, Siemens Energy, Orlando, Florida, United States – Ballroom (Room 1)</td>
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<td>12:20</td>
<td>Keynote XII: Dr. Timothy Kotnour, Lockheed Martin St. Laurent Professor, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, USA – Ballroom (Room 1)</td>
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<tr>
<td>2:00</td>
<td>GSCM Panel (Onsite)</td>
<td>Engineering Education</td>
<td>(onsite)</td>
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<tr>
<td>4:00</td>
<td>Diversity and Inclusion Panel</td>
<td>GSCM (onsite)</td>
<td>Case Studies (onsite)</td>
<td>Parallel Session</td>
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7:00 – 10:00 pm, June 14 – Conference Awards Dinner
June 11 (Saturday) - Session: 6:00 – 7:45 am

Judging Committee Chair: Dr. Doga Demirel, Florida Polytechnic University, Florida, USA
Zoom Host: Yordanos Jewani, Florida Polytechnic University, Lakeland, Florida, USA

ID 344  Gen Z’s Attitude to Cultural Appropriation: a Case Study of The Appointment of Pon Papua’s Ambassador
Riza Yulie Astuti and Yanaurla Kusuma Permata Sari, Communication Science Department, Faculty of Digital Communication and Hotel & Tourism, Bina Nusantara University, Jakarta, Indonesia

ID 543  A Correlation Study of Perceived Stress and Performance of Internship of Graduating Students
Wendell Gil L. Atencia, Rizen Janelle M. Co, Lara Camille V. Gical, Richard D. Lumoko, Jessica I. Regondola, Coleen Charlotte O. Simon and Lemuel Edwin L. Tan, Department of Industrial Engineering – College of Engineering and Architecture, Technological Institute of the Philippines Cubao, Quezon City, Philippines

ID 192  Comparative Analysis of the Correlation of Perceived Stress and Creative Thinking Capacity of Architecture and Industrial Engineering Students
Alison E. Altares, Avery S. Capanzana, Gabriel Oliver B. Cornia, Arwin Earl R. Denila, Patricia Alyssa D. La Madrid and Jason Albert A. Paragas, Department of Industrial Engineering, College of Engineering and Architecture, Technological Institute of the Philippines – Quezon City Cubao, Quezon City, Philippines

ID 71  Assessment of Behavioral Impacts and Socio-Economic Status stand of Blockchain Games to Undergraduate Students in Metro Manila
Alfred Joshua S. Aquino, John Roy D. Marucot, Edlyn D. Pangilinan, Jolly Ann J. Villaflores and Janina Elyse A. Reyes, Industrial Engineering Department Technological Institute of the Philippines – Manila, Philippines

ID 513  Comparative Analysis: Assessing the Technical Competence of the Affected Graduating Industrial and Mechanical Engineering Students During the COVID-19 Crisis
Jan Anthony Magalong, Rey Stephen Bersalona, Miguel Boqueo, Kennith Jalapadan, Joel Magundayao and Christian Martisano, Department of Industrial Engineering, Technological Institute of the Philippines Cubao, Quezon City, Philippines

ID 473  Comparing backpropagation-based neural networks and deep learning to predict the NASA Task Load Index
Gabriel Perez, Juanita Gonzalez and Dr. Luis Carlos Rabelo, Department of Industrial Engineering & Management Systems, University of Central Florida, Florida

ID 154  Integrating Virtual Reality and Motion Capture in Unity 3D for the Training of Children with Cerebral Palsy
Xiaoxu Ji, Kristen Snarski, Department of Physical Therapy, Gannon University, Erie, USA

ID 534  Enhancing Personal Decision Making During and After a Hurricane to Preserve Wellness + The Creation of a System of Information for First Responders
Oscar Gonzalez, Applied Optimization Group @ UPRM, Puerto Rico, USA

ID 567  Redesigning an Inclusive Digital Contact Tracing Service Systems: Product-Focus and Implementation Phase of Design Thinking Approach
Javy Denver K. Chan, Wilwyn G. Mendoza and Kim Lyn B. Sandoval, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, Philippines

ID 601  Multi-Criteria Stochastic Inventory Classification, Optimization & Simulation of an E-commerce Site by Integrating Support Vector Machine & Genetic Algorithm
Ferdous Sarwar, Pritam Deb, Department of Industrial and Production Engineering, Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh

ID 675  Optimization of Drilling Parameters to Achieve Maximum Circularity on AISI 316 Using Topsis Method
Ch. Muni Sudheer, A.Vijay Kumar, D.Dhanunjay and D.Sivaji, UG Student, Department of Mechanical Engineering, Vignan's Institute of Information Technology, Visakhapatnam, India

6:00 – 8:00 am, SATURDAY  Graduate Paper Competition  Virtual Room 2
Judging Committee Chair: Dr. Doga Demirel, Florida Polytechnic University, Florida, USA
Zoom Host: Yordanos Jewani, Florida Polytechnic University, Lakeland, Florida, USA

ID 67  COVID-19 Vaccination Intention in Indonesia: A Comprehensive Conceptual Model
Tri Widianti and Romadhani Ardi, Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Depok, Indonesia

ID 68  Organizational Excellence and Agility: Correlation Model
Karam Al-Assaf, Master of Science in Engineering Management, Rochester Institute of Technology, Dubai, UAE
ID 210  Contributions to MPPT control for an autonomous photovoltaic system based on artificial neural network and genetic algorithm
Chouki Ihssane, Doctor in electrical engineering, Department of Electrical Engineering, Mohammed V University in Rabat, Morocco
Wira Patrice, IRIMAS, Institut de Recherche en Informatique, Mathématiques, Automatique et Signal, Haute Alsace University, Mulhouse, France.
Zazi Malika, Professor, Department of Electrical Engineering, Mohammed V University in Rabat, Morocco

ID 289  Understanding the linkage and driving factors to premature closure of microbusinesses: A case study in Cebu, Philippines
Eunice Cristyl D. del Pilar, Industrial and Systems Engineering Department, De La Salle University, Malate, Manila, Philippines

ID 435  Big Data for Village-level Smart Farms
Eric De Vera Reynoso, School of Industrial Engineering and Engineering Management, Mapua University, Manila, Philippines
Grace Lorraine Intal, School of Information Technology, School of Industrial Engineering and Engineering Management, Mapua University, Manila, Philippines

ID 494  Development of Radiation Protective Mobile Case
Md Mamunur Rashid, Md Reshawat Hossain, Mosnabi Mohosin Aditya, Arnob Chowdhury Mithun, Mohammad Shoab, Sazid Hossain Niloy, Sourav Kumar Ghosh, Department of Industrial & Production Engineering, Bangladesh University of Textiles, Dhaka, Bangladesh

6:00 – 7:45 am, SATURDAY High School STEM Project Competition Virtual Room 4
Judging Committee Chair: Prof. Don Reimer, IEOM Society
Zoom Host: Aamar Shabir, Florida Polytechnic University, Lakeland, Florida, USA

HIGH SCHOOL STEM PROJECT COMPETITION

ID 249  A Study on Hacking Attacks and Vulnerabilities in Self-Driving Car with Artificial Intelligence
Se In Jung, Shin Dong Ho, Ph.D., PAUL MATH SCHOOL, 12-11, Dowontongmi-gil, Cheongcheon-myeon, Goesan-gun, Chungcheongbuk-do, Republic of Korea

ID 250  Trend Analysis of Autonomous Vehicles Using Artificial Intelligence
Lee Ji Yun, Shin Dong Ho, Ph.D., PAUL MATH SCHOOL, 12-11, Dowontongmi-gil, Cheongcheon-myeon, Goesan-gun, Chungcheongbuk-do, Republic of Korea

ID 251  Artificial Intelligence Fusion and Applied Research in the Medical Field Side
Kim See You, Shin Dong Ho, Ph.D., PAUL MATH SCHOOL, 12-11, Dowontongmi-gil, Cheongcheon-myeon, Goesan-gun, Chungcheongbuk-do, Republic of Korea

INNOVATIVE IDEA COMPETITION

Sarah Ali, Clinical Assistant Professor, Department of Engineering, Loyola University Chicago, Chicago, Illinois, USA

ID 271  Modificación de harina de trigo incorporando cáscara de granada como aditivo alimentario para pasteles y pastas
Sergio Patricio Ortiz Onofre, María Alejandra Islas, Álvaro Makowsky Rico, Fernanda Silva Vázquez, Marcelo Gerardo González and Nora Guerrero López, Estudiante, Ingeniería Industrial y de Sistemas, Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico Southfield, MI, USA

6:00 – 7:45 am, SATURDAY Business Management Virtual Room 5
Session Chair: Dr. Shwetha M Krishna, Assistant Professor, Business School, Vellore Institute of Technology, Chennai, India
Zoom Host: Ms. Shipa, UTHM, Malaysia

ID 270  Intrinsic, Extrinsic Rewards and Job Satisfaction: Role of Job Performance and Creative Performance
Cynthia Manimegalai, Research Scholar, Business School, Vellore Institute of Technology, Chennai, India
Dr. Shwetha M Krishna, Assistant Professor, Business School, Vellore Institute of Technology, Chennai, India

ID 299  Comparison of Consumer Loyalty Between Shopee and Tokopedia: A Systematic Literature Review
Haryadi Sarjono, Danang Prithandoko, Malvin Jevon, Roselyn Lauwsen, Gabriela Clara, Hadi Sasana Putra, BINUS Business School Undergraduate, Bina Nusantara University, Jakarta Barat, Indonesia

ID 301  Empowering Employee Performance Against the COVID-19 Pandemic in Human Resource Management in Industry
Haryadi Sarjono and Hendry Hartono, BINUS Business School Undergraduate, Bina Nusantara University, Jakarta, Indonesia
Ricky Ramadhan Putra, Figo Mohammad Thamyiz, Kennard Lorenzo Lekatompessy and Jason Gorga Simanjuntak, BINUS Business School Undergraduate, Bina Nusantara University, Marga Mulya, Kec. North Bekasi, Bekasi City, West Java, Indonesia

ID 302  The Influence of Brand Prestige, Service Quality, Food Quality and Perceived Value on Customer Satisfaction in The Fast-Food Industry
Haryadi Sarjono, Vinzon Georvano and Hendry Hartono, BINUS Business School Undergraduate Binus University, Jakarta, Indonesia

ID 303  Systematic Literature Review, Comparison of Interest in Buying Food on Shopee App and Gojek App in Century Pandemic
Haryadi Sarjono and Hendry Hartono, BINUS Business School Undergraduate, Bina Nusantara University, Jakarta, Indonesia
Deey Ratnasari, Princess Widiayanti, Hana Utami Zahra and Salsabilla Tri Rahmah, BINUS Business School Undergraduate, Bina Nusantara University, Marga Mulya, Kec. North Bekasi, Bekasi City, West Java, Indonesia

ID 304  Systematic Literature Review: Employee Productivity in E-Commerce in Indonesia Over Covid-19 pandemic
Haryadi Sarjono, Danang Prithandoko, Alfina Fauziah Pradhirini Hadi, Calvin, Muhammad Fakhri Haikal and Sherly Angelika, BINUS Business School Undergraduate, Bina Nusantara University, Jakarta Barat, Indonesia
ID 332 Socio Economic Factors and Justice. Colombia 2010-2015
Mariluz Osorio Quiceno and Wilson Alexander Pinzón Rueda, Universidad Distrital “Francisco José de Caldas”, Bogotá - Colombia
Edgar Olmedo Cruz Mián, Administración de Empresas AEMD, Corporación Universitaria Minuto de Dios, Bogotá, Colombia

6:00 – 7:45 am, SATURDAY Logistics Virtual Room 6
Session Chair: Ali Elkamel, Department of Chemical Engineering, Faculty of Engineering, University of Waterloo, Waterloo, Ontario, Canada
Zoom Host: Ms. Rubana, Central Women’s University, Dhaka, Bangladesh

ID 7 Hybrid Party Logistics, Hybrid Supply Network (Case Study: Iran Khodro Automotive Company)
Dr. Javad Khamisabadi, PhD, Department of Industrial Engineering & Management, Islamic Azad University, Tehran, Iran
Mohammad Rouhina, PhD Candidate, Industrial Engineering, University of Science and Technology, Tehran, Iran

ID 11 Hybrid Party Logistics, Hybrid Supply Network (Case Study: Iran Khodro Automotive Company)
Dr. Javad Khamisabadi, PhD, Department of Industrial Engineering & Management, Islamic Azad University, Tehran, Iran
Mohammad Rouhina, PhD Candidate, Industrial Engineering, University of Science and Technology, Tehran, Iran

ID 275 Optimization of Last Mile Hub Location Determination for Package Delivery using Facility Location Problem
Muhammad I. Hazami, Zulkarnain Zulkarnain, Industrial Engineering Department, Universitas Indonesia, Jakarta, Indonesia

ID 312 Optimization of Lubricant Distribution with Alternative Coordinates and Number of Warehouses Considering Truck Capacity and Time Windows
Taufik Rizkiantri, Teuku Yun M. Zaqloel, Andri Dwi Setiawan, Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Jakarta, Indonesia

ID 336 Implementation of logistics balancing and engineering with the novel approach (Case Study: Tondar 90 assembly shop – Iran Khodro Co)
Javad Khamisabadi, Department of Industrial Management, Faculty of Management, Islamic Azad University, Tehran, Iran

ID 352 Practical Cases of Locating Regional Logistics Hubs: A Systematic Literature Review
Mohammed Alkhahtani, Associate Professor in Industrial Engineering Department, and Vice-Dean of Advanced Manufacturing Institute, King Saud University, Riyadh, Saudi Arabia

ID 377 Troubleshooting the Deodoriser Unit in a Palm Oil Refinery
Intan Suhaire Salleh, Nur Syuhada Ali, Khairiyah Mohd-Yusof, Nurul Sulaika Sulaiman and Hishamuddin Jamaluddin, Faculty of Engineering, Universiti Teknologi Malaysia, Malaysia
Farzad Hourfar and Ali Elkamel, Department of Chemical Engineering, Faculty of Engineering, University of Waterloo, Waterloo, Ontario, Canada
Gholamreza Zahedi, Ozone Solutions Inc., Hull, Iowa, United States

6:00 – 7:45 am, SATURDAY Project Management Virtual Room 7
Session Chair: Hwi-Chie Ho, Selvi, Industrial Engineering Department, Bina Nusantara University, Jakarta, Indonesia
Zoom Host: Christian Leon-Cardenas, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

ID 267 Optimization of Assembly Process in the Production Line to Increase Productivity with the Line Balancing Method in the Indonesian Automotive sector
Andy Kresna, M. Dachyar and Farizal, Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Jakarta, Indonesia

ID 205 Combinatorial Optimization of Various Placement Machines for PCB Assembly Lines
James C. Chen and Yu-Jie Chang, Department of Industrial Engineering and Engineering Management, National Tsing Hua University, Hsinchu, Taiwan
Tzu-Li Chen, Associate Professor, Department of Industrial Engineering and Management, National Taipei University of Technology, Taipei, Taiwan

ID 496 Aggregate Planning to Minimize Production Cost Case Study: Automotive Spare Part Company
Hafidz Akbar Halim and Komarudin, Department of Industrial Engineering, Faculty of Engineering, University of Indonesia, Depok, Indonesia

ID 225 Development of Risk-Based Standard Operating Procedure for the Design And Engineering Phase Of ATC Tower And Supporting Facilities Construction Project To Enhance Efectivity And Eficiency
Sebastian Anthony Toli and Yusuf Latief, Department of Civil Engineering, Engineering Faculty, University of Indonesia, Salemba, Jakarta, Indonesia

ID 230 Development of Cost Planning Standard for Mechanical and Electrical Work on Stadium Main Building Area using Design and Build Contract to Improve Cost Accuracy
Novan Salim, Anggoro Putro and Yusuf Latief, Department of Civil & Environment Engineering, University of Indonesia, Depok, West Java, Indonesia

ID 268 A Conceptual Framework for Knowledge Management of Integrated Design and Construction Phase Audit Process on Infrastructure Project Based on Risk, Using WBS, BIM and Web to Enhance Construction Safety Performance
Danang Budi Nugroho and Yusuf Latief, Department of Civil Engineering, Faculty of Engineering, University of Indonesia, Depok, Jawa Barat, Indonesia

ID 436 An Application of Critical Chain and Lean Project Management to Improve Project Efficiency: A Case Study of Construction Project in Indonesia
Hwi-Chie Ho, Selvi, Ricky Damawan, Gladysia Valerien, Industrial Engineering Department, Bina Nusantara University, Jakarta, Indonesia
A.A.N. Perwira Redi, BINUS Graduate Program - Master of Industrial Engineering, Bina Nusantara University, Jakarta, Indonesia
Khristin Edi Nugroho Soeibtiari, Industrial Engineering Department, Bina Nusantara University, Jakarta, Indonesia

June 11 (Saturday) - Session: 8:00 – 9:45 am

8:00 – 9:45 am, SATURDAY Undergraduate Paper Competition Virtual Room 1
Judging Committee Chair: Dr. Reinaldo Sanchez-Arias, Department of Data Science and Business Analytics, Florida Polytechnic University, USA
Zoom Host: Sai Abhijith Medavarapu, Master of Science in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA

ID 165 System Analysis and Design of Hotel Information System using Design Thinking Methodology
Maria Shaina A. Apolinar, Michael Matthew Kristofer B. Regala, Janelle Anne I. Santiago and Grace Lorraine D. Intal, School of Information Technology, Mapua University, Metro Manila, Philippines
ID 184  System Analysis and Design of Patient Information System Using Design Thinking Methodology
Ma. Bernadeth M. Oliverio, Devon Earl T. Panes, Trinah Mae C. Vinluan and Grace Lorraine D. Intal, School of Information Technology, Mapua University, Philippines

ID 294  The Analysis of Productivity by Using Objective Matrix (OMAX) Methodology
Restu Maha Dewi and Tika Endah Lestari, Department of Industrial Engineering, Faculty of Engineering and Technology, Sampoerna University South Jakarta, Indonesia

ID 295  The Implementation of Overall Equipment Effectiveness (OEE) Methodology to Analyze Productivity of Sugar Factory
Siwi Maulididja Handayani and Tika Endah Lestari, Department of Industrial Engineering, Faculty of Engineering and Technology, Sampoerna University

ID 349  Framing Analysis of CNN Indonesia’s News About the Escape of Selebgram Rachel Vennya from Quarantine
Panji Imanul Syahrul and Yanyanta Kusuma Permata Sari, Communication Science Department, Faculty of Digital Communication and Hotel & Tourism, Bina Nusantara University, Jakarta, Indonesia

ID 350  Students Uncertainty Reduction Strategy During Online Lectures
Cindi Jane Suharjo and Yanuarita Kusuma Permata Sari, Communication Science Department, Faculty of Economics and Communication, Bina Nusantara University, Jakarta, Indonesia

ID 397  The Implementation of Subsidies for Micro, Small, and Medium Enterprises. A Framework in Achieving Development for the WTO Member States
Putu George Matthew Simbolon, Universitas Kristen Indonesia Most Outstanding Student, International Legal Studies Micro Master Student in University of Louvain, Belgium
Faculty of Law, Center for International Law and Human Rights, Universitas Kristen Indonesia, Jakarta, Indonesia

ID 650  The Effect of e-service quality, e-service satisfaction, on e-service loyalty of Indonesian E-commerce using SEM-PLS Methodology
Annisa Nurul Fitriani, Imanuddin Hasbi, Mahir Pradana, Tri Indra Wijaksana and Budi Rustandi Kartawinata, School of Communication and Business Telkom University, Bandung, Indonesia

8:00 – 9:45 am, SATURDAY  Graduate Student Paper Competition  Virtual Room 2
Judging Committee Chair: Dr. Doga Demirel, Florida Polytechnic University, Florida, USA
Zoom Host: Yordanos Jewani, Florida Polytechnic University, Lakeland, Florida, USA

ID 572  Economic Analysis of Fuel Trucks Transportation for the Gas Station in Riyadh City
Abdulrahman Alosaimi, Abdullah Alshahrani and Amal Aljahdari, College of Engineering, Graduate Studies, Alfaisal University, Riyadh, Saudi Arabia
Dr. Sobhi Mejjaouli, Industrial Engineering Department, Alfaisal University, Riyadh, Saudi Arabia

ID 617  Development of eBike sharing system through the use of iDeS Method
Curzio Pagliari and Martina Marruganti, Master Degree Student, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy
Leonardo Frizziero, Senior Assistant Professor, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

ID 674  Mailroom Operations Improvement Using Simulation
Asnath S. Mosha, Masters in Engineering and Operations Management, University of New Haven, West Haven, CT 06516, USA
Jack Krivitsky, Masters in Industrial Engineering and MBA, University of New Haven, West Haven, CT 06516, USA
M Ali Montazer, Ph. D., Professor of Industrial Engineering and Engineering Management, University of New Haven, West Haven, CT, USA

ID 465  Quality 4.0 – A Quality Focused Implementation Strategy for Industry 4.0 Technologies
Thomas Jones, Doctoral Candidate, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, USA

ID 26  In-Stream Marine Litter Collection Device Location Determination Using Bayesian Network
Abdullah Battawi, Mohammad Marufuzzaman and Junfeng Ma, Department of Industrial and system Engineering, Mississippi State University, Starkville, Mississippi, USA
Ellie Mallon, Vedral, Anthony and Eric Sparks, Department of coastal Marine Extension Program, Mississippi State University, Starkville, Mississippi, USA

8:00 – 9:45 am, SATURDAY  Masters Thesis Competition  Virtual Room 4
Judging Committee Chair: Prof. Don Reimer, IEOM Society
Zoom Host: Aamar Shabir, Florida Polytechnic University, Lakeland, Florida, USA

ID 31  Leveraging choice modeling technique for enhancing the cyber resilience of the smart grid
Kesava Karishma Devi Dadi, Graduate Student, Industrial and Systems Engineering, Mississippi State University, Mississippi State, USA
Niamat Ibne Hossain, Assistant Professor, Engineering Management Department, Arkansas State University, State University, USA
Raed Jaradat, Associate Professor, Industrial and Systems Engineering, Mississippi State University, Mississippi State, USA

ID 185  Supply Chain Coordination Under Retail Competition: Literature Review and Research Opportunity
Dewi Rahmasari and Niniet I. Arvitrda, Department of Industrial Engineering, Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia

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Muhammad Indra Nur Pratama and Yusuf Latief, Department of Civil Engineering, University of Indonesia, Depok, West Java, Indonesia

ID 256  Education Quality Improvement of PKBM (an Indonesian Community Learning Center) in West Java with EduQUAL based on accreditation during COVID-19 Pandemic  
Hilmana Radhia Putera and Zulfia Fitri Ikatanasanis, Industrial Engineering Department, Faculty of Engineering, Universitas Mercu Buana Meruya, Jakarta, Indonesia

ID 262  Lean Construction Analysis of the Interior Project  
Dinda Ayu Nawangsa and Zulfia Fitri Ikatanasanis, Departement of Industrial Engineering, Universitas Mercu Buana, DKI Jakarta, Indonesia

ID 576 Unlocking the Potential of Augmented Reality for Decision Making Under Battlefield Stress  
Betsy Guzmán, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, USA

8:00 – 9:45 am, SATURDAY  
Session Chair: Mariluz Osorio Quiceno, Universidad Distrital “Francisco José de Caldas”, Bogotá - Colombia  
Zoom Host: Ms. Shipa, UTHM, Malaysia

ID 270  Intrinsinc, Extrinsic Rewards and Job Satisfaction: Role of Job Performance and Creative Performance  
Cynthia Manimegalai and Dr. Shwetha M Krishna, Business School, Vellore Institute of Technology, Chennai, India

ID 299  Comparison of Consumer Loyalty Between Shopee and Tokopedia: A Systematic Literature Review  
Haryadi Sarjono, Danang Prihandoko, Malvin Jevon, Roselyn Lauwesen, Gabriela Clara and Hadi Sasana Putra, BINUS Business School Undergraduate, Bina Nusantara University, Jakarta Barat, Indonesia

ID 301  Empowering Employee Performance Against the COVID-19 Pandemic in Human Resource Management in Industry  
Haryadi Sarjono and Hendry Hartono, BINUS Business School Undergraduate, Bina Nusantara University, Jakarta, Indonesia

ID 302  The Influence of Brand Prestige, Service Quality, Food Quality and Perceived Value on Customer Satisfaction in The Fast-Food Industry  
Haryadi Sarjono, Vinson Georvano and Hendry Hartono, BINUS Business School Undergraduate Binus University, Jakarta, Indonesia

ID 304  Systematic Literature Review, Comparison of Interest in Buying Food on Shopee App and Gojek App in Century Pandemic  
Haryadi Sarjono and Hendry Hartono, BINUS Business School Undergraduate, Bina Nusantara University, Jakarta, Indonesia

ID 308  Systematic Literature Review: Employee Productivity in E-Commerce in Indonesia Over Covid-19 pandemic  
Haryadi Sarjono, Danang Prihandoko, Alfina Fauziah Pradhini Hadi, Calvin, Muhammad Fakhri Haikal and Sherly Angelika, BINUS Business School Undergraduate, Bina Nusantara University, Palmerah, Jakarta Barat, Indonesian

ID 332  Socio Economic Factors and Justice. Colombia 2010-2015  
Mariluz Osorio Quiceno and Wilson Alexander Pinzón Rueda, Universidad Distrital “Francisco José de Caldas”, Bogotá - Colombia

8:00 – 9:45 am, SATURDAY  
Session Chair: Anj Lahmar, University of Dubai, United Arab Emirates  
Zoom Host: Ms. Rubana, Central Women’s University, Dhaka, Bangladesh

ID 36  Designing Supply Chain to Hedge Against Disruptions: A Review of Literature in General and Agro Food Supply Chains  
Sherine Beshara, Hadi Fors, Nermine Harraz and Hamdy Elwany, Production Engineering Department, Alexandria University, Egypt

ID 237  Mapping and Visualization Research Trend of Supply Chain Digital Twin: A Bibliometric Review  
Fairuz Iqbal Maulana, Raden Aditya Kristamtomo Putra and Donna Carolina, Bina Nusantara University, Jakarta Indonesia

ID 259  Humanitarian Supply Chain Maturity Assessment Model for Indonesian Humanitarian Organization  
Maha Restu Gusti Azizi and Arian Dhini, Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Depok, Indonesia

ID 284  Car Demand Forecasting of Toyota in Indonesia: A Case Study Medium Price Category  
Andi Maulana, Farizal and Rahmat Nurcahyo, Department of Industrial Engineering, Universitas Indonesia, Depok, Indonesia

ID 305  Towards the Development of a Performance Evaluation of a Hyperledger Fabric Blockchain-based Application for Traceability of Distribution and Recall Transactions in Pharmaceutical Supply Chain  
Mary Jane C. Samonte, Danica Grace D. Advincula, Sofia Samantha B. Beltran and Aiko D. Obog, School of Information Technology, Mapúa university, Manila, Philippines

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ID 335  Supply Chain Risk Assessment integrating Vulnerability index
Anj Lahmar, University of Dubai, United Arab Emirates

8:00 – 9:45 am, SATURDAY  Technology Management  Virtual Room 7
Session Chair: Yaumil Khaireh, Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Depok, Indonesia
Zoom Host: Christian Leon-Cardenas, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

ID 48  Success Factors Identification of ERP Implementation in Indonesian Coal Mining Enterprise
Chandrika Nastiti Hendrawan, Rahmat Nurcahyo and Farizal, Industrial Engineering Department, Faculty of Engineering, Universitas Indonesia, Depok, Jawa Barat, Indonesia

ID 258  Development of the Triple Helix Model Research and Innovation Funding Assessment Instrument with the Design Thinking Method
Nur Rahmawati and Amalia Suzianti, Department of Industrial Engineering, University of Indonesia, Depok, Indonesia

ID 307  Towards the Development of a Usability Evaluation of a Pregnancy Health Monitoring System Using IoT
Mary Jane C. Samonte, School of Information Technology, Mapúa University, Manila, Philippines
Bea Shanelle Francesca F. Franco, Helisha A. Ocampo, and Mauryn Angela F. Rodriguez, School of Information Technology, Mapúa University, Makati City, Philippines

ID 383  Development of User Interface Design for Electronic Waste Collection with a Design Thinking Approach
Afiata Donny N and Amalia Suzianti, Department of Industrial Engineering, University of Indonesia, Depok, Indonesia

ID 189  Development of a Forecasting Tool to Address High Percentage of Breach in Delivery Times in a Local Food Delivery Service
Tomas Gabriel N. Domingo, Noah P. Hermogenes, Nikko E. Yuag, Engr. Carlos Ignacio Jr. P. Lugay, Ph.D., PIE, ASEAN Eng., Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Metro Manila, Philippines

ID 293  Decision Making of Product Deletion and Repetition for The Muslim Fashion Industry
Yaumil Khaireh and Farizal, Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Depok, Indonesia

ID 126  A new lot sentencing method for products with multiple quality characteristics based on process yield
Shih-Wen Liu, Assistant Professor, College of Management, National Chin-Yi University of Technology, Taichung, Taiwan
Chien-Wei Wu, Distinguished Professor, Department of Industrial Engineering and Engineering Management, National Tsing Hua University, Hsinchu, Taiwan

June 11 (Saturday) - Session: 10:00 – 11:45 am

10:00 – 11:45 am, SATURDAY  Undergraduate Paper Competition  Virtual Room 1
Judging Committee Chair: Dr. Reinaldo Sanchez-Arias, Department of Data Science and Business Analytics, Florida Polytechnic University, USA
Zoom Host: Sai Abhijith Medavaranap, Master of Science in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA

ID 199  Design, Fabrication and Analysis of Chassis for Electric Bike
Fahim Foysal Arnob, Md. Shahnewaz Khan and Md. Humayun Kabir Bhuiyan, Department of Mechanical Engineering, Military Institute of Science and Technology, Dhaka, Bangladesh

ID 586  Effects of Gender on Emotional Intelligence in Employability skills of Technical Education Graduate
Ibrahim Haruna Bako and Yusmari Binti Yusof, Faculty of Technical and Vocational Education, University Tun Hussein Onn Malaysia, Malaysia

ID 227  “Relationships Between Sleep Quality, Fatigue, Stress and Anxiety of IE41S1 in Technological Institute of the Philippine Quezon City: A Multiple Regression Analysis”
Aban Martson, Art Jeffrey’s Castillo, Russel Dela Merced, Donavel Lazarte, Alexander C. Malapitan, Paul Ezekiel Sonza, Department of Industrial Engineering, College of Engineering and Architecture Technological Institute of the Philippines - Quezon City Cubao, Quezon City Philippines

ID 276  Assessing the Effect of Physical Health Struggles of the Frontline Delivery Riders to their Mental Workload Using NASA TLX
Jaimelhen M. Aviñante, Roland Batucal, Roi Vincent B. Limin, Rose-Ann P. Pasiona, Danica Myle B. Tibayan and Janina Elyse A. Reyes, Industrial Engineering Department, Technological Institute of the Philippines-Manila, Philippines

ID 158  Business Process Modelling in the WCM 4.0 Achievement: Digitalization of a WCM Pillar in a Portuguese Company
Juliana Basulo Ribeiro, Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Portugal
Juliana Salvadorinho, Institute of Electronics and Informatics Engineering of Aveiro (IEETA), Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Aveiro, Portugal
Marlene Amorim, Research Unit on Governance, Competitiveness and Public Policies (GOVCOPP) and Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Aveiro, Portugal
Leonor Teixeira, Institute of Electronics and Informatics Engineering of Aveiro (IEETA), Governance, Competitiveness and Public Policies (GOVCOPP), Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Aveiro Portugal

ID 2  Strategic prospective to improve the environmental sustainability of the copper mining industry in Peru
Gabriela Chumacero-Mamani, Claudia Rossana Chávez-Yánac and Edilberto Miguel Ávalos-Ortecho, Faculty of Engineering and Architecture, Universidad de Lima, Lima, Lima, Peru

ID 05  Implementation of lean manufacturing to increase the machine’s availability of a metalworking company
Diego Cabezas-Fulca, Ismael Muelle-Macchiavello and Edilberto Ávalos-Ortecho, Industrial Engineering Study Program, Universidad de Lima, Lima, Peru
ID 649  Social Media Marketing's Effect on Brand Awareness of Indodax Financial Service
Reza Ramadhan, S1 Business Administration Study Program, Faculty of Communication and Business, Telkom University, Bandung, Indonesia
Aditya Wardhana, Tri Indra Wijaksana and Mahir Pradana, School of Communication and Business Telkom University, Bandung, Indonesia

ID 10:00 – 11:45 am, SATURDAY  Doctoral Dissertation Competition  Virtual Room 2
Judging Committee Chair: Dr. Doga Demirel, Florida Polytechnic University, Florida, USA
Zoom Host: Yordanos Jewani, Florida Polytechnic University, Lakeland, Florida, USA

ID 113  Preoperative Predictors for 30-day Postoperative Emergency Department Visit after a Bariatric Surgery
Pawan Bhandari and M. Affan Badar, Department of Applied Engineering and Technology Management, Indiana State University, IN, USA
Christopher Kluse, College of Technology, Architecture and Applied Engineering, Bowling Green State University, Bowling Green, OH, USA
Suhansa Rodchua, School of Technology Graduate Programs, University of Central Missouri, Warrensburg, MO, USA

ID 148  A Conceptual Framework for Innovation Product and Marketing Strategy at Precast Construction Company in Indonesia to Increase Competitiveness
Ranti Hidayawanti and Yusuf Latief, Department of Civil Engineering, Universitas Indonesia, Depok, Jawa Barat, Indonesia

ID 395  Leveraging Data Analytics to Study the Impact of State Budget Cuts on Public Higher Education Institutions in the United States
Praveen Kumar Guraja, Coleman College of Business, University of Pikeville, Pikeville, Kentucky, USA
M. Affan Badar and Farman A. Moayed, College of Technology, Indiana State University, Terre Haute, Indiana, USA
Christopher J. Kluse, Department of Engineering Technology, Bowling Green State University, Bowling Green, Ohio, USA

ID 447  Characterizing Adopter and Non-Adopter of Photovoltaic System in Indonesia
Nurwidiani Nurwidiani, Mechanical and Industrial Engineering Department, Universitas Gadjah Mada, Indonesia
Industrial Engineering Department, Sultan Agung Islamic University, Indonesia
Bertha Maya Sopha and Adhika Widyaparaga, Mechanical and Industrial Engineering Department, Universitas Gadjah Mada, Indonesia

ID 482  Integrated Agent-Based Simulation, Machine Learning, and Optimization of the Urban Food-Energy-Water Nexus and Incorporating Renewable Electrification, and Micro Supply Chains
Marwen Elkamel and Luis Rabelo, Industrial Engineering & Management Systems Department, University of Central Florida, Orlando, FL, USA

ID 524  Implementation of Ergonomics System and ISO 14001:2015 to provide a safe, healthy workplace and Environmental Sustainability in the Heavy Metal Construction Industry
Augustin Madouma Ma Lewandja PhD Candidate, Dr. Madonsela Nelson Sizwe and Dr. Victor Mofokeng,The University of Johannesburg, Faculty of Engineering and Built Environment, Quality and Operations Management Department, Johannesburg, South Africa

ID 555  A Framework for Assessing the Maturity Level of Implementing Quality 4.0 in Higher Education Institutions
Bandar Alzahrani, PhD student and Ahmad Elshennawy, Professor, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, USA

ID 615  Exploring of Service Quality and Satisfaction among US Hajj Pilgrims in Accordance with 2030 Vision Objectives
Majid Alshaibi and Ahmad Elshennawy, Professor, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, USA

ID 618  A Conceptual Model for Quality 4.0 Deployment in US Based Manufacturing Firms
Thomas Logan Jones, Department of Industrial Engineering and Management Systems, in the College of Engineering and Computer Science, at the University of Central Florida, Orlando, Florida, USA

ID 52  Human Augmentation: A System Engineering Conceptual Framework
Hazeln Gamboa and Dr. Slim Saidi, Rochester Institute of Technology, Dubai RIT Dubai, United Arab Emirates

ID 120  Reducing the Ergonomic Risk Level in the Production Area of a Manufacturing Company
Arturo Realyvásquez-Vargas, Karina Cecilia Arredondo-Soto, Guadalupe Hernández-Escobedo, Departamento de Ingeniería Industrial Tecnológico Nacional de México/Instituto Tecnológico de Tijuana, Tijuana, Baja California, Mexico
Jorge Luis García Alcaraz, Department of Industrial Engineering and Manufacturing, Autonomous University of Ciudad Juárez, Ciudad Juárez, Chihuahua, Mexico
Cuauhtémoc Sánchez Ramírez, Division of Research and Postgraduate Studies, Tecnológico Nacional de México/Instituto Tecnológico de Orizaba Orizaba, Veracruz, Mexico

ID 151  Competence management in Industry 4.0: An innovative concept to support a Skill@Mgmt 4.0 tool
Tiago Bastos and Juliana Salvadorinho, Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), University of Aveiro, Aveiro, Portugal
Andrea Vitória, Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), Research unit in Governance, Competitiveness and Public Policies (GOVCOPP), University of Aveiro, Aveiro, Portugal
Leonor Teixeira, Department of Economics, Management, Industrial Engineering and Tourism (DEGEIT), Institute of Electronics and Informatics Engineering of Aveiro (IEETA), University of Aveiro, Aveiro, Portugal

ID 520 Effects of Academic Workload on the Burnout of Students during Online Learning
Ma. Janice J. Gumasing, Christian Jay E. Sesnorio, Henrie Louis P. Subido and Charles Kristian K. Ilo, School of Industrial Engineering and Management, Mapua University, Murala St., Intramuros, Manila, Philippines

Lean Six Sigma Competition

ID 238 Failure Analysis Process Leadtime Reduction in a Manufacturing Company through Eliminate, Combine, Re-arrange, and Simplify (ECRS) Concept
Gertyn Calica Altes, Klint Allen A. Mariñaś, Michael N. Young, and Yogi Tri Prasetyo, School of Industrial Engineering and Engineering Management Mapúa University, Manila, Philippines
Klint Allen A. Mariñaś and Yung-Tsan Jou, Department of Industrial and Systems Engineering, Chung Yuan Christian University, Taiwan
Reny Nadilatón, Department of Information Systems, Institut Teknologi Sepuluh November, Kampus ITS Sukolilo, Surabaya, Indonesia

ID 260 Production capacity increase in medical device manufacturing assembly lines
Karina Cecilia Arredondo-Soto, Arturo Realyvásquez-Vargas and Guadalupe Hernández-Escobedo, Departamento de Ingeniería Industrial Tecnológico Nacional de México/Instituto Tecnológico de Tijuana, Tijuana, Baja California, Mexico
Jorge Luis García Alcaraz, Department of Industrial Engineering and Manufacturing, Autonomous University of Ciudad Juárez, Ciudad Juárez, Chihuahua, Mexico
Cuauhtémoc Sánchez Ramírez, Division of Research and Postgraduate Studies, Tecnologico Nacional de México/Instituto Tecnologico de Orizaba Orizaba, Veracruz, Mexico

ID 266 Improving Patient Experience and Processing Times in a Major Metropolitan Hospital Through the Application of a Lean Six Sigma Methodology
Michael Sedlack, Department of Electrical and Computer Engineering, University of Central Florida, Orlando, Florida, USA
Chirag Merchant, Ismael Hussein, Matthew Kenney, Nathan O'Brien, and Thomas Strock, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, USA

ID 651 Applying Lean Six Sigma to Enhance the Medical devices Repair Process in Public Healthcare Sector in Egypt
Lina El-Sherif Ismail, Assistant Professor, Department of Industrial and Management Engineering, Arab Academy for Science Technology & Maritime Transport (AASTMT), Alexandria, Egypt
Heba Elhaddad, Assistant Professor, Department of Industrial Engineering, Alexandria Higher Institute of Engineering and Technology (AIET), Alexandria, Egypt
Mohamed S. Saleh, Military Technical College, Egyptian Armed Forces, Cairo, Egypt
Ayman A. Nassar, Medical Services Administration, Egyptian Armed Forces, Cairo, Egypt
Ahmed A. Mohamed, Director, Solutions Engineering, Healthcare System

10:00 – 11:45 am, SATURDAY

Competitions

Virtual Room 5

Judging Committee Chair: Dr. Hayder Zghair, Southern Arkansas University
Zoom Host: Ms. Shipa, UTHM, Malaysia

Poster Competition

ID 322 Mathematical Analysis of Self-Heating in Materials with High Dissipation
Irina Viktorova, Leo Rebholz, and Victoria Luongo, School of Mathematical and Statistical Sciences, Clemson University, South Carolina, USA
Abdullah Kose, Graduate Student, Department of Automotive Engineering, Clemson University, Clemson, South Carolina, USA

ID 433 Development Food Healing Application Based on Mood Identification Using Intelligent Automatic Heartbeat Recognition System
Nicholas Jason Antonio, Yosse Ricardo Nobel, and Winda Astuti, Automotive and Robotics Program, Computer Engineering Department, BINUS ASO School of Engineering, Bina Nusantara University, Jakarta, Indonesia

Senior Design Project Competition

ID 99 Pharmaceutical Warehouse Product Flow Optimization
Hecyaliz Rubero, Leslie Ann Feliciano, Abneris Ayala and Jannette Pérez-Barbosa, Department of Engineering, Universidad Ana G. Méndez, Gurabo, Puerto Rico, USA

Simulation Competition

ID 338 Machining process optimization using simulation in Flexsim
Renan Pontes, Samuel Francisco das Virgens, Talia Pontes, Rodrigo Luiz Gigante and Henrique Ewbank, Facens University, Sorocaba, São Paulo, Brazil

Supply Chain and Logistics Competition

ID 10 Iran Logistics Market, a Smart Knowledge-Based Logistics Market with Smart Party Logistics (SPL) Approach
Dr. Javad Khamisabadi, Department of Industrial Management, Faculty of Management, Islamic Azad University, Tehran, Iran
Mohammad Rouhina, Director of Systems Management, Iran Khodro Automotive Co (IKCO), Tehran, Iran
Seyed Mohammad Hosseini, Deputy Minister of International Affairs MAHBAK foundation
Javad Heidaran, M.A Student, Department of Electronic Commerce, Islamic Azad University, Tehran, Iran
ID 573 Economic Analysis of Fuel Trucks Transportation for The Gas Station in Riyadh City
Abdulrahman Alosaimi, Abdullah Alsahranri and Amal Aljahdari, College of Engineering, Graduate Studies, Alfaisal University, Riyadh, Saudi Arabia
Dr. Sobhi Mejjaoui, Industrial Engineering Department, Alfaisal University, Riyadh, Saudi Arabia

ID 603 Risk Factors Analysis in Apparel Supply Chain Management
Md Mamunur Rashid and Mohammed Raihan Uddin, Department of Industrial & Production Engineering, Bangladesh University of Textiles, Dhaka, Bangladesh

10:00 – 11:45 am, SATURDAY

ID 445 Supply Chain Disruption: A Conceptual Framework on Decision Making Using Neuroscience
Sadiya Siddique, Graduate Student, Department of Mechanical and Industrial Engineering, Rochester Institute of Technology, Dubai, UAE

ID 464 Export Demand Estimation of Thai Rice by Using Artificial Neural Network Model
Adcharawadee Keawwondee and Chakthong Thongchattu, Department of Industrial Engineering, School of Engineering, University of Phayao Phayao, Thailand
Asawin Pasutham, Business School, University of Thai Chamber of Commerce, Bangkok, Thailand

ID 487 The Influence of Supplier Integration, Internal Integration, and Customer Integration on Supply Chain Performance Modified by Demand Uncertainty
Adhitya Trubus Hanggara, Kelvin Anthony, Stephanie and Sambudi Hamali, Management Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 204 Operational Factors Analysis and Performance Values of Green Manufacturing at Brewing Company Using Green SCOR Method - A Case Study
Danang Pinardi Putra and Alfonz Lawrenz Kilay, Industrial Engineering Department, BINUS Graduate Program - Master of Industrial Engineering Bina Nusantara University, Jakarta, Indonesia
Rienna Oktarina, Industrial Engineering Department, Bina Nusantara University, Jakarta, Indonesia

ID 288 Analysis of Green Supply Chain Management Application in Indonesian Automotive Company Using Integrated Green SCOR and AHP Method
Samuel Tagan R. Sinaga and Maya Arlini, Industrial Engineering Department, Universitas Indonesia, Jakarta, Indonesia

ID 317 Core Retrieval Decisions Under Quality Uncertainty in Remanufacturing System
Ashutosh Mishra and Priyanka Verma, Operations and Supply Chain Management, National Institute of Industrial Engineering (NITIE), Vihar Lake, Mumbai, India

ID 451 Circular Supply Chain System for Electric Vehicle in Indonesia: A Conceptual Model
Karsi Widiawati and Bertha Maya Sopha, Industrial Engineering Program, Department of Mechanical and Industrial Engineering, Universitas Gadjah Mada (UGM), Yogyakarta, Indonesia

ID 27 A Study on The Impact of Green Cosmetic, Personal Care Products, And Their Packaging to Consumer’s Purchasing Behavior in the Philippines
Engr. Carlos Ignacio JR. P. Lugay, PHD, PIE, ASEAN ENGR., Glorizen V. Delapaz, Rhaniel Myxen A. Montes, Justin Ivan D.R. Oliquino and Hannah Kressel A. Pascasio, Department of Industrial Engineering, University of Santo Tomas, España Blvd., Sampaloc, Manila, Philippines

ID 440 Coordination Mechanism among Key Players during Disaster Relief Operations: A Case Study
Bertha Maya Sopha, Industrial Engineering Program, Department of Mechanical and Industrial Engineering, Universitas Gadjah Mada (UGM) Yogyakarta, Indonesia

10:00 – 11:45 am, SATURDAY

ID 425 The Intensification of Interplanetary Within the Laboratory Through Fabricating Steel Material into Shelve.
Simphiwe Ngcobo and Bantubenzani Nelson Mdolo, Department of Industrial engineering, Systems Engineering and Management Engineering, University of South Africa, Johannesburg, Florida, South Africa

ID 405 Banana paper, an organic alternative
Diego Sanchez, Instituto Tecnologico y de Estudios Superiores de Monterrey, Mexico

ID 403 Incorporation of pomegranate peel as food additive in wheat flour, for baking and pastry uses
Sergio Patricio Ortiz Onofre, María Alejandra Islas, Álvaro Makowsky Rico, Fernanda Silva Vázquez, Marcelo Gerardo González y González and Nora Guerrero López, Student, Industrial Engineering, Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico

ID 417 Designing a Business Process Based on Knowledge Management and Product Development Process in IT Industry
Amalia Suzianti and Adhwa Rana Sausan, Department of Industrial Engineering, Universitas Indonesia, Depok, West Java, Indonesia

ID 325 Incremental and Radical Innovation Patterns on MSMEs
Puji Prabowo, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia
ID 527  Dilemma of a Trainee – Corporate Assimilation Initiatives
Nilanka Chatterjee and Dr. Asha Bhatia, Universal Business School, Karjat, Maharashtra, India

ID 444  A Comparative Study of the Indonesian and Brazilian Coffee Industry: A Porter’s Diamond Approach
Natasha Sonia Siahaan and Roseno Aji Affandi, International Relations Department, Faculty of Humanities, Bina Nusantara University, Jakarta, Indonesia

June 11 (Saturday) - Session: 12:00 – 1:45 pm

12:00 – 1:45 pm, SATURDAY  Undergraduate Paper Competition  Virtual Room 1
Judging Committee Chair: Dr. Reinaldo Sanchez-Arias, Department of Data Science and Business Analytics, Florida Polytechnic University, USA
Zoom Host: Sai Abhijith Medavaranu, Master of Science in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA
ID 133  Applying CAD/CAE/CAM Techniques for Optimizing the Design and Reducing the Cost of a Pediatric Stander
Carlos Arenas-Calvo, Sebastián Gifford-Velasquez, Alberto Flores-Perez, Juan Quiroz-Flores and Martín Collao-Díaz, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Perú
ID 161  Treatment of residual effluents from the textile industry based on adsorption methods using agro-industrial waste as adsorbent agents: a systematic review
Mario Galvan-Rodríguez, Jackeline Mamani-Apaza, Alberto Flores-Perez, Juan Quiroz-Flores and Martín Collao-Díaz, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Perú
ID 6  The Implementation of Lean Manufacturing to Increase Productivity in a Textile Company: Case of Study
Rodríguez-Concha Iván Alberto y Rosadio-Vela Jimena Roxana, Bachelor of Industrial Engineering, Faculty of Engineering and Architecture, Universidad de Lima, Lima, Perú
Ávalos Ortecho Edilberto Miguel, Professor, Faculty of Engineering and Architecture, Universidad de Lima, Lima, Lima, Perú
ID 653  Optimization of Vehicle Routing Problem with Delivery Systems
Ilham Kissani, Rabie Zine and Abdelaziz Sahel, School of Science and Engineering, Al Akhawayn University in Ifrane, Morocco
ID 647  Modelling and Analysis of I.C. Engine Piston
Kakaraparty Kumara Aditya, Ruttila Soma Sekhar, Karakata Ajay and Jalluri Ajesh Kumar, UG student, Department of Mechanical Engineering, Vignan’s Institute of Information Technology, Visakhapatnam, India
Ch. Siva Ramakrishna, Associate Professor, Department of Mechanical Engineering, Vignan’s Institute of Information Technology, Visakhapatnam, India
ID 668  Design And Analysis of Nine Speed Gear Box with Two Stages
Jaswanth Pudi, Sri Krishna Prasad Mutchakarla, Anisha Kotini and Vamsi Krishna Jagarapu, UG students, Department of Mechanical Engineering Vignan’s Institute of Information Technology, Visakhapatnam, India
Gangadhar Budireddi, Assistant Professor, Department of Mechanical Engineering, Vignan’s Institute of Information Technology, Visakhapatnam, India

12:00 – 1:45 pm, SATURDAY  COVID-19 Analytics Competition  Virtual Room 2
Judging Committee Chair: Dr. Doga Demirel, Florida Polytechnic University, Florida, USA
Zoom Host: Yordanos Jewani, Florida Polytechnic University, Lakeland, Florida, USA
ID 247  Construction Company Performance Trends during the Covid-19 Pandemic
Andie M. Endrijatno and Isti Surjandari, Industrial Engineering Department, Universitas Indonesia, Jakarta, Indonesia
ID 489  Crowd Detection Camera to Prevent COVID-19
Alaroob Bawarith, Alhanoof Alhamdan, Nouf Attar and Nouf Mohammad, Student, Department of Electrical and Computer Engineering, Effat University College of Engineering, Effat University, Jeddah, Saudi Arabia
ID 492  Development of COVID-19 Regional Forecast Models Using Machine Learning Approaches
Md Mamunur Rashid and Ben D. Sawyer, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida, United States
ID 535  South Korea's Public Diplomacy and COVID-19: Evidence from an Expert Survey in Indonesia
Tina Doney, Nathanael Wirawan and Elia Syafputri Prihatini, International Relations Department, Bina Nusantara University, Jakarta, Indonesia

12:00 – 1:45 pm, SATURDAY  Artificial Intelligence  Virtual Room 4
Session Chair: Ali Arishi, Department of Industrial, Systems, & Manufacturing Engineering, Wichita State University, Wichita, USA
Zoom Host: Aamar Shabir, Florida Polytechnic University, Lakeland, Florida, USA
ID 82  Process Monitoring in Additive Manufacturing Using Machine Learning Approach
Md Fashiar Rahman, Tzu-Liang (Bill) Tseng and Hongjun Xu, Department of Industrial, Manufacturing and Systems Engineering, The University of Texas at El Paso, El Paso, Texas, USA
Yuxin Wen, Fowler School of Engineering, Chapman University, Orange, CA, USA
ID 87  Using Machine Learning to Determine Employability of Work Integrated Learning Interns in the ICT Industry

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ID 329 Learning models for delivery location clustering and drone-based routing decisions in last-mile distribution
Ali Arishi and Krishna Krishnan, Department of Industrial, Systems, & Manufacturing Engineering, Wichita State University, Wichita, USA

ID 340 Non-contact Inspection of Worm and Worm wheel using a Vision system
M. B. Kiran, Associate Professor, Department of Mechanical Engineering, School of Technology, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India

ID 391 Experimental Investigation into Texture Analysis of Machined and 3D printed Surfaces
M. B. Kiran, Associate Professor, Department of Mechanical Engineering, School of Technology, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India

ID 424 A Photo-Realistic Simulation and Test Platform for Autonomous Vehicles Research
Alexandra Dubs, Victoria Correa Andrade and Onur Toker, Department of ECE, Florida Polytechnic University, Lakeland, Florida, USA

ID 426 Machine Learning Models for Crop Yield Prediction and a Smart Irrigation System
Marwen Elkamal and Luis Rabelo, Industrial Engineering & Management Systems Department, University of Central Florida, Orlando, FL, USA

Morgan C. Wang, Department of Statistics and Data Science, University of Central Florida, Orlando, FL, USA

12:00 – 1:45 pm, SATURDAY  Sustainability  Virtual Room 5
Session Chair: Sonam Chawla, Department of Human Resource, Jindal Global Business School, O. P. Jindal Global University, India
Zoom Host: Ms. Shita, UTHM, Malaysia

ID 437 Study of the Use of Natural Banana Fiber Developing Reinforced Composite Materials, supporting the SDGs of the 2030
Schedule
Pedro Jacome Onofre, Manuel Gutiérrez Nava and René Diaz Rebollar, Advanced Technology Center, Postgraduate -CIATEQ, A.C, Santiago de Querétaro, México.

ID 23 Agile Methodologies based method for the UDA-ERP software implementation
Cesar Mendez-Johegyi and Catalina Astudillo-Rodriguez, Computer Science Engineering School, Universidad del Azuay, Cuenca, Ecuador
Esteban Crespo-Martinez, Engineering of Production School, Computer Science Engineering School, Universidad del Azuay, Cuenca, Ecuador
Ana Vasquez-Aguilera, Engineering of Production School, Universidad del Azuay, Cuenca, Ecuador
Gabriela Chica-Contreras, Accountant and Auditory School, Universidad del Azuay, Cuenca, Ecuador

ID 30 Structural Systemic Method for Dealing with Part Failure Impact on Mechanical Subset’s Neighboring Parts
Anouar Hallioui, Industrial Techniques Laboratory, Center for Doctoral Studies in Sciences and Techniques and Medical Sciences, Faculty of Sciences and Techniques of Fez, Sidi Mohamed Ben Abdellah University, Fez, Morocco
Brahim Herrou, Superior School of Technology of Fez, Sidi Mohamed Ben Abdellah University, Morocco, Industrial Techniques Laboratory, Center for Doctoral Studies in Sciences and Techniques and Medical Sciences, Faculty of Sciences and Techniques of Fez, Sidi Mohamed Ben Abdellah University, Fez 2202 - Imouzzer road, Morocco
Ricardo S. Santos, GOV/COPP, University of Aveiro, 3810-193 Aveiro, Portugal, Mechanical Engineering Department, ISEL, Polytechnique Institute of Lisbon, Lisbon, 1959-007, Portugal
Polinapapilinho F. Katina, Department of Informatics and Engineering Systems, University of South Carolina Upstate, Spartanburg, SC 29303, USA
Hassan Khadiir, Industrial Techniques Laboratory, Center for Doctoral Studies in Sciences and Techniques and Medical Sciences, Faculty of Sciences and Techniques of Fez, Sidi Mohamed Ben Abdellah University, Fez 2202 - Imouzzer road, Morocco

ID 41 Virtual Reality in Industrial Applications: An overview
Md. Milton Uddin, Graduate Research Assistant, Department of Electrical Engineering, The University of Texas at Tyler, Tyler, Texas, USA
Joshun Park, Assistant Professor, Department of Electrical Engineering, The University of Texas at Tyler, Tyler, TX, US

ID 22 The impact of the presence of women on the board of directors on the performance of Organizations. Study of The Relationships Between Gender Diversity on the Board of Directors, Innovation and Performance
Nabila Chnaida, Abdelhack Sahib Eddine and Fairouz Naj, Laboratory of Studies and Research in Economics and Management (LERSEM) National School of Business and Management of El-Jadida, Chouaib Doukkali University – El Jadida (Morocco)

ID 406 Organizational Implications of Dual Career Couples: A Study in the Indian Context
Sonam Chawla, Assistant Professor, Department of Human Resource, Jindal Global Business School, O. P. Jindal Global University, India
Ateequr Rahman, Ph.D. Research Scholar, School of Management & Entrepreneurship, Indian Institute of Technology, Jodhpur, India
K. K. Lai, Professor & Vice President, Department of Business Administration, Choaoyang University of Technology Taichung, Taiwan.

ID 208 Sustainable Plastic Waste Management Using a System Dynamics Approach
Marwa Al Nahlawi, Sameh Al-Shihabi and Ridvan Aydin, Department of Industrial Engineering & Engineering Management, University of Sharjah Sharjah, UAE

12:00 – 1:45 pm, SATURDAY  Six Sigma and Quality  Virtual Room 6
Session Chair: Abdul Kadir Hamid, Anwar Jarndal Electrical Engineering Department University of Sharjah Sharjah, UAE
Zoom Host: Ms. Rubana, Central Women's University, Dhaka, Bangladesh

ID 580 Design a Treadmill HIIT Program with Six Sigma DMAIC Methodology for Diabetic Patients
Mason Chen, Stanford Online High School, San Jose, CA, USA
ID 347  Improving the Outcome of Design Projects with a Cost Engineering Approach
Dennis Tribby, University of Central Florida, United States

ID 394  Application of Lean Six Sigma to Reduce Maintenance Tickets Duration in Residential Facilities
Omar AlJuraiyed and Ali AlZaeri, College of Engineering, Graduate Studies, Alfaisal University, Riyadh, KSA
Dr. Sobhi Mejjaouli, Industrial Engineering Department, Alfaisal University, Riyadh, KSA

ID 334  Colombia: Sub National Murder Cyclicality, 2010-2020
José Martín Díaz Pulido and Edgar Olmedo Cruz Micán, Facultad de Ciencias Empresariales, Administración de Empresas, Maestría en Educación Corporación Universitaria Minuto de Dios, Bogotá, Colombia
Rodrigo Quintero Reyes and Wilson Alexander Pinzón Rueda, Facultad Tecnológica, Universidad Distrital “Francisco José de Caldas” Bogotá, Colombia
Ricardo Mancera Pardo, Tony Edson Sánchez Calderón, RealData S.A.S., Bogotá D.C. Colombia

ID 80  Development of Drivers' Psychophysiological State Detection Measures and Relevant Machine Learning Methods
Shaima Alameeri, Department of Industrial Engineering and Engineering Management, University of Sharjah, Sharjah, UAE
Imad Alsyouf, Department of Industrial Management and Engineering Management, Sustainable Engineering Asset Management (SEAM) Research Group, University of Sharjah, Sharjah, UAE
Ahmad Alzghoul, Department of Data Science, Princess Sumaya University for Technology, Amman, Jordan
Hossam Almahasneh, Affiliated member of Sustainable Engineering Asset Management (SEAM) Research Group University of Sharjah Sharjah, Omar Jaradat, Qamcom Research and Technology, Gothenburg, Sweden
Abdul Kadir Hamid, Anwar Jarndal Electrical Engineering Department University of Sharjah Sharjah, UAE

ID 162  Productivity Increase Through the Application of Lean, TQM and SLP Tools in the Peruvian Craft Brewery Cluster
José Ulloa-Durand, Ander Vargas-Altamirano, Alberto Flores-Pérez, Juan Quiroz-Flores and Martín Collao-Diaz, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Perú

ID 560  Economic Decisions in Madeleine Boutique, Ie 315 - Engineering Economy and Cost Analysis
Dana Altheeb, Haifa Albahli and Dr. Sobhi Mejjaouli

ID 561  What-If Analysis at a food service operation
Sobhi Mejjaouli, Industrial Engineering Assistant Professor, Alfaisal University, Riyadh, Saudi Arabia
Noura AlMandeel, Nouf AlSultan, Hind AlBabtain, Anoud Alamnu and Amal Alhussain, Student, Department of Industrial Engineering, Alfaisal University, Riyadh, Saudi Arabia

ID 563  Widget Design Project (Extended Fighting Glove)
Zaed Safari, Washintenaw Technical Middle College, Ann Arbor, Michigan, United States

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ID 581  Design a Digital Music Melody Hearing Test  
Mason Chen, Stanford Online High School, San Jose, CA, USA

ID 663  Compare Wind and Solar Energy in Bangladesh  
Anas Ali, Michigan Islamic Academy, Ann Arbor, Michigan, USA

ID 665  The Relationship Between Achievement in and Attitude toward Mathematics in the Digital Age  
Alina Zhong, Stanford Online High School, California, USA

2:00 – 3:45 pm, SATURDAY  
Industry 4.0  
Virtual Room 4

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<td>Alina Zhong</td>
<td>Stanford Online High School, California, USA</td>
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Session Chair: A. Boukili, Industrial techniques laboratory (LTI), Sidi Mohammed Ben Abdellah University, Fez, Morocco  
Zoom Host: Aamar Shabir, Florida Polytechnic University, Lakeland, Florida, USA

ID 219  Punching Process Optimization in a Metal Manufacturing Industry  
Erick Guillermo Moran Martínez, Manufacturing Engineer, Master’s degree in Management and Direction of Engineering Projects, Postgrad CIATEQ, A.C., Aguascalientes, México  
Missael Alberto Román-del-Valle, Research Associate in Logistics and Supply Chain, Department of IT, Electronics and Control Centro de Tecnología Avanzada, CIATEQ A.C., Villahermosa, Tabasco, México

ID 14  Relating Analytics for Employee Turnover to Strategy of Organizations  
R.R.K. Sharma, Sonal Gupta and Ravi Gunjan, Department of Industrial and Management Engineering, IIT Kanpur India  
Niraj K Vishvakarma, IIIT Lucknow India  
KK Lai, President. CYUT Taiwan

ID 170  Integrated impact of circular economy, industry 4.0, and lean manufacturing on the sustainability performance of Plastic and Petrochemical Organizations  
Ahmed M. Ghaithan, Construction Engineering and Management Department, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

ID 218  Advanced Electromagnetic Wheel Robot  
Sultan A. Shaqaq, Senior Engineer, Saudi Aramco, Eastern Province, Dhahran, Saudi Arabia

ID 515  Enabling Digital Warehousing by an Additive Manufacturing Ecosystem  
Arvin Shadravan and Hamid R. Parsaei, Wm Michael Barnes ’64 Department of Industrial & Systems Engineering, Texas A&M University College Station, Texas, USA

ID 25  Petri Networks: Application to Discrete Systems of Dynamics Event  
A. Boukili, Industrial techniques laboratory (LTI), Sidi Mohammed Ben Abdellah University, Faculty of Sciences and Techniques (FST), Fez, Morocco  
M. Mesrar, Signals, Systems and Components Laboratory (LSSC), Sidi Mohammed Ben Abdellah University, Faculty of Sciences and Techniques (FST), Fez, Morocco

2:00 – 3:45 pm, SATURDAY  
OR  
Virtual Room 5

<table>
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<td>ID 89</td>
<td>Learning from Data Water Quality Functions for Monitoring and Controlling Water Quality in Networks</td>
<td>Kia Zadeh</td>
<td>Industrial Engineering Ph.D. Student, School of Computing and Augmented Intelligence (SCAI), Arizona State University, Tempe, USA</td>
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<td>ID 392</td>
<td>CFD Critical Review on Slurry Flow in Horizontal Pipelines</td>
<td>Willy M. Mukendi</td>
<td>Department of Industrial and Systems Engineering, Cape Peninsula University of Technology, Cape Town, South Africa</td>
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<tr>
<td>ID 439</td>
<td>Optimization Approach for Quai Crane Scheduling Problem Under a Combined Constraints</td>
<td>Imane Torbi</td>
<td>Student researcher, Mechanical department, National high School of Electricity and mechanics ENSEM /Hassan II University, Casablanca, MOROCCO</td>
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<tr>
<td>ID 512</td>
<td>Why it is important to discuss the Generic Features of a Discrete Event Simulation Software.</td>
<td>Sankar Sengupta</td>
<td>Professor, Department of Industrial and Systems Engineering at Oakland University, MI, USA</td>
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<td>ID 351</td>
<td>Design and Fabrication of a Dual Condition PIN-ON-DISC Automated Wear Testing Machine</td>
<td>Uhuami Abdulwahab</td>
<td>Department of Industrial Training Fund, Industrial Skills Training Centre, Lokoja, Kogi State, Nigeria</td>
</tr>
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<td>ID 386</td>
<td>Assessing the stochastic dependence effect on the integrated preventive maintenance scheduling and production planning</td>
<td>Ziyad Bahou</td>
<td>Mohammadia School of Engineers, Mohammed V University of Rabat, Morocco</td>
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<td>ID 12</td>
<td>LP Model of Aggregate Production Planning (APP): Inclusion of Aggregate Shortage</td>
<td>RK Sharma, Dept of IME IIT Kanpur, India</td>
<td>President, CYUT Taiwan</td>
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2:00 – 3:45 pm, SATURDAY  
**SCM**  
Virtual Room 6  
Session Chair: Ümmühan Akbay, Department of Management, Işık University, Istanbul 34980, Turkey  
Zoom Host: Ms. Rubana, Central Women’s University, Dhaka, Bangladesh  

**ID 333  Personal Injury by Automotors. Colombia 2010 to 2020**  
Diego Karachas Rodríguez and Edgar Olmedo Cruz Micán, Facultad de Ciencias Empresariales, Administración de Empresas AEMD, Corporacion Universitaria Minuto de Dios, Bogotá, Colombia  
Rodrigo Quintero Reyes and Wilson Alexander Pinzón Rueda, Universidad Distrital “Francisco José de Caldas”, Bogotá, Colombia  
Carlos Andrés Arango Londoño, Universidad de La Salle, Bogotá, Colombia  
Fidel Andrés Olate Bustos, RealData S.A.S., Bogotá D.C. Colombia  

**ID 58  Artificial Intelligence in Logistics and Supply Chain Management: A Perspective on Research Trends and Challenges**  
Hasan Bafaqih, Supply Chain Management Department, College of Business Administration, University of Business and Technology, Jeddah, Saudi Arabia  

**ID 18  Modeling Additive Manufacturing Supply Chain considering Customer Product Choices**  
Julekha Hussain Ranta, Graduate Student, Department of Computational Engineering, Mississippi State University, Starkville, Mississippi, USA  
Raed Jaradat, Associate Professor, Department of Industrial & Systems Engineering, Mississippi State University, Starkville, Mississippi, USA  
Terril C. Falls, Associate Director, Institute for Systems Engineering Research (ISER), Mississippi State University, Starkville, Mississippi, USA  

**ID 134  System Dynamics in Supply Chains: A Bibliometric Review**  
Jorge Luis García Alcaraz and Liliana Avelar Sosa, Department of Industrial Engineering and Manufacturing, Autonomous University of Ciudad Juárez, Ciudad Juárez, Chihuahua, Mexico  
Cuauhtémoc Sánchez Ramírez, Division of Research and Postgraduate Studies, Tecnologico Nacional de México/Instituto Tecnologico de Orizaba Orizaba, Veracruz, Mexico  
Arturo Realyvásquez-Vargas and Karina Cecilia Arredondo Soto, Departamento de Ingenieria Industrial, Tecnológico Nacional de México/Instituto Tecnológico de Tijuana, Tijuana, Baja California, Mexico  
Ari Happonen, LUT School of Engineering Science, LUT University, Lappeenranta, Finland  

**ID 427  Agent Based Modeling of the Food-Energy-Water Nexus, Renewable Electrification, and Micro Supply Chains**  
Marwen Elkamel and Luis Rabelo, Industrial Engineering & Management Systems Department, University of Central Florida, Orlando, FL, USA  

**ID 285  Personality Traits in Supply Chain Contracting**  
Ümmühan Akbay, Departament of Management, Işık University, Istanbul 34980, Turkey  
Murat Kaya, Department of Industrial Engineering, Sabanci University, Istanbul 34956, Turkey  

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**June 11 (Saturday) - Session: 4:00 – 5:45 pm**  

**4:00 – 5:45 pm, SATURDAY  
Undergraduate Paper Competition**  
Virtual Room 1  
Judging Committee Chair: Dr. Reinaldo Sanchez-Arias, Department of Data Science and Business Analytics, Florida Polytechnic University, USA  
Zoom Host: Sai Abhijith Medavarapu, Master of Science in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA  

**ID 430  Prospective strategies to improve the environmental sustainability of the copper mining industry in Peru**  
Gabriela Chumacero-Mamani and Claudia Rossana Chávez-Yánac, Graduated, Faculty of Engineering and Architecture, Universidad de Lima, Lima, Lima, Perú  
Edilberto Miguel Ávalos-Ortecho, Professor, Faculty of Engineering and Architecture, Universidad de Lima, Lima, Lima, Perú  

**ID 169  Improvement Model to Increase production plan using forecasting tools and capabilities in an Industrial Paints**  
Ariana Balbin-Reymundo, Alberto Flores-Pérez, Juan Quiroz-Flores and Martin Collao-Diaz, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Perú  

**ID 190  Improvement Proposal Applying Standardized Work and 5’S to reduce the rate of returned orders of a Poultry company under the PDCA Cycle**  
Danitza Silva-Campusano, Dayana Vega-Romero, Alberto Flores-Pérez, Juan Quiroz-Flores and Martin Collao-Diaz, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Perú  

**ID 297  Biodegradable cardboard with straw fibre**  
Daryl Herrera, Fernanda Rengifo, Gerardo Vázquez, Ivonne García, Jackeline Salinas and Jesus Rodríguez, Industrial and Systems Engineering students, Monterrey Institute of Technology and Higher Education (ITESM), Monterrey, Nuevo León, Mexico  

**ID 319  Production process of a textile made from Punica Granatum L waste**  
Jorge Arábimulo, Maximiliano Carmona, Paola Criollos and Patricio Marcos, Students, School of Business and Engineering, Tecnológico de Monterrey, Monterrey, Nuevo León, México  

**ID 577  Development of Material Requirement Planning System for Snack Manufacturing Company**  
Saad bin Saidan, Mohammed AlShuqayar and Al-Waleed Al-Babtain, Student, Department of Industrial Engineering, Alfaisal University, Riyadh, Saudi Arabia  

**ID 579  Economics Analysis for PLACOS’S Pipe and Pipe Fittings Machine**  
Sarah Alajmi and Sarah El Sakka, Industrial Engineering Students, Alfaisal University, Riyadh, Saudi Arabia  
Dr. Sobhi Mejjaouli, Professor, Department of Industrial Engineering and Management Systems
June 12 (Sunday)

June 12 (Sunday) - Session: 6:00 – 7:45 am

6:00 – 7:45 am, SUNDAY       Human Factors and Ergonomics       Virtual Room 1
Session Chair: K. K. Lai, Professor & Vice President, Department of Business Administration, Chaoyang University of Technology Taichung, Taiwan
Zoom Host: Sai Abhijith Medavarapu, Master of Science in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA

ID 460   Human Development Index among states of India: An empirical study
Sonam Chawla, Assistant Professor, Department of Human Resource, Jindal Global Business School, O. P. Jindal Global University, India
Ateequr Rahman, Ph.D. Research Scholar, School of Management & Entrepreneurship, Indian Institute of Technology, Jodhpur, India
Smita Sharma, Ph.D. Research Scholar, Jindal Global Business School, O. P. Jindal Global University, India
K. K. Lai, Professor & Vice President, Department of Business Administration, Chaoyang University of Technology Taichung, Taiwan.

ID 517   Perceived Risk of COVID-19 among Students using RIKA Assessment Risk Factors
Ma. Janice J. Gumasing, James Brylle C. Foz, Martin James D. Olan and Daniel John B. Sacramento, School of Industrial Engineering and Engineering Management, Mapua University, Muralia St., Intramuros, Manila, Philippines

ID 519   Effects of Sleep Quality on the Fatigue Level of Students during COVID-19 Pandemic
Ma. Janice J. Gumasing, Julienne Mikhaella C. delos Reyes, Louis Miguel C. Durai, Julia Sofia D. Mangoaong, and Gaea Marithe W. Victor, School of Industrial Engineering and Engineering Management, Mapua University, Muralia St., Intramuros, Manila, Philippines

ID 194   Technostress of an Employee Affects the Employee Retention Rate in an Organisation
Deveendra Menon, Au Yong Hui Nee and Syed Muhammad, UTAR Malaysia

ID 452   Design of Ergonomic Computer Mouse Pad to Improve Comfort and Reduce Mouse Elbow Injury
Ahmad Tubagus D. P., Assistant Professor, Industrial Engineering Department, Binus University, Jakarta, Indonesia
Ezra Peranginangin, Assistant Professor, Industrial Engineering Department, Binus University, Jakarta, Indonesia
Nathania Haryanto, Adhelin Jatsimin H. J. and Jennifer Giovanni, Product Design Engineering Program, Binus University, Jakarta, Indonesia

ID 459   Selection Interviews: Relationship with Job Performance and the Moderating Role of Training Interventions
Sonam Chawla, Assistant Professor, Department of Human Resource, Jindal Global Business School, O. P. Jindal Global University, India
Smita Sharma, Ph.D. Research Scholar, Jindal Global Business School, O. P. Jindal Global University, India
Ateequr Rahman, Ph.D. Research Scholar, School of Management & Entrepreneurship, Indian Institute of Technology, Jodhpur, India
K. K. Lai, Professor & Vice President, Department of Business Administration, Chaoyang University of Technology Taichung, Taiwan

6:00 – 7:45 am, SUNDAY       Data Analytics       Virtual Room 2
Session Chair: Affi Panji Thuvalu Lagonah, Information Systems Department, Bina Nusantara University, Jakarta, Indonesia
Zoom Host: Yordanos Jewani, Florida Polytechnic University, Lakeland, Florida, USA

ID 450   Customer Clustering and Classification for CRM Loyalty Program in Milk Powder Industry
Melky Simorangkir and Zulkarnain, Department of Industrial Engineering, Universitas Indonesia, Selemba, Jakarta, Indonesia

ID 466   The Effect of Social Media Marketing on Marketing Performance in Higher Education during Covid-19 Pandemic with Customer Satisfaction as Intervening Variable
Affi Panji Thuvalu Lagonah, Information Systems Department, School of Information Systems, Bina Nusantara University, Jakarta, Indonesia
Fiona Avangeline Jonathan, Information Systems Department, School of Information Systems, Bina Nusantara University, Jakarta, Indonesia
Devrel Wijaya, Information Systems Department, School of Information Systems, Bina Nusantara University, Jakarta, Indonesia
Nurlina, Information Systems Department, School of Information Systems, Bina Nusantara University, Jakarta, Indonesia

ID 468   The Effect of Board of Commissioners’ Experience and Education and Company’s Size on the Quality of Financial Statements in Goods Consumer Companies Listed in Indonesia Stock Exchange in 2015-2017
Abdurrahman Fakhry, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia
Mohamad Heykal, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia

ID 469   The Influence of Intellectual Capital on Corporate Values with Financial Performance As Intervening Variables In Financial Sector Companies Listed In Indonesia Stock Exchange Period 2014-2016
Shareh, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia
Nuraini Sari, Accounting Department, BINUS Online Learning, Bina Nusantara University, Jakarta, Indonesia
ID 475  Effect of Liquidity, Leverage and Company Size on Tax Aggressiveness in Banking Companies Listed in Indonesia Stock Exchange in 2014-2016
Andi Nerissa Novianti, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia
Heri Sukendar, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia

Nhemia Winelma Pasaribu and Gen Norman Thomas, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia

Silvia Julianty and Setiani Putri Hendratno, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia

6:00 – 7:45 am, SUNDAY  Business Management  Virtual Room 3
Session Chair: Edgar Pratama, School of Communication and Business Telkom University, Bandung, Indonesia
Zoom Host: Karthik Dhandapani, MSIE Program, Lawrence Tech, MI, USA

ID 537  The Relationship Between Foreign Workers’ Perceived Organizational Support, Cross-cultural Adjustment, and Performance in Hospitality Industry
Novita Indah Mulyaningrum, Dendy Rosman, Ichwan Masnadi and Laurencia Feriska, Hotel Department, Faculty of Digital Communication and Hotel&Tourism, Bina Nusantara University, Jakarta, Indonesia

ID 538  Business Model Canvas: SMEs Recovery during the COVID-19 Pandemic
Sri Hartati, Engkus Kusworo, Purwanti Hadiswati and Funny Mustikasari Elita, Faculty of Communication Science, Universitas Padjajaran, Jatinangor, Indonesia
Sri Hartati, School of Business and Management, Institute Technology Bandung, Bandung, Indonesia

ID 544  Clustering Different Learning Behavior with Model of Culture
Elia Oey, International Business & Management Program, Management Department, Bina Nusantara University, Jakarta, Indonesia
Jason Lim, Civil Engineering Department, Pradita University, Tangerang, Indonesia

ID 558  Factors Affecting Bandung Students Using Internet Banking as A Non-Cash Payment Tool in The Covid-19 Pandemic Era (Case Study of Livin Application by Bank Mandiri)
Enrico Nathanael Eden and Budi Rustandi Kartawinata, Faculty of Communication and Business Telkom University, Bandung, Indonesia

ID 559  The Influence of Social Media Marketing Through Instagram And Brand Awareness on onsumer’s Purchase Intention of Speedtuner In Indonesia
Figo Restu Perdana and Budi Rustandi Kartawinata, Faculty of Communication and Business Telkom University, Bandung, Indonesia

ID 568  The Impact of Corporate Image, Customer Loyalty, Customer Satisfaction and Affective Commitment in The Consumer Clothing Brand
Muhammad Mizani, Mahendra Fakhri, School of Communication and Business Telkom University, Bandung, Indonesia

ID 569  Influence of Habit and Facilitating Conditions on Use Behavior with M-Banking Intention as a Mediation Variable on Livin Mandiri
Edgar Pratama and Mahendra Fakhri, School of Communication and Business Telkom University, Bandung, Indonesia

6:00 – 7:45 am, SUNDAY  Business Management  Virtual Room 4
Session Chair: Marjun A. Manahan, School of Information Technology, Mapua University, Manila, Philippines
Zoom Host: Curzio Pagliari, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

ID 114  Banking Strategy in Maintaining Debtor Loyalty: The Mediation Role of Debtor Satisfaction
Danny Dewanto, Septio Adje Binawanputra and Yokie, Graduate Students in Management, Bina Nusantara Business School, Bina Nusantara University, Jakarta, Indonesia
Nur Damayanti, Lecturer in Management, Bina Nusantara Business School, Bina Nusantara University, Jakarta, Indonesia

ID 115  Determining the Influencing Factors of Purchase Intention of the Class 2021 Students of Bina Nusantara University Alam Sutera
Hardi Maringan A.H, Rahmat Ilahi and Christie Carrey, Master Students in Management, Bina Nusantara Business School, Bina Nusantara University, Jakarta, Indonesia
Nur Damayanti, Lecturer in Management, Bina Nusantara Business School, Bina Nusantara University, Jakarta, Indonesia

ID 49  Predictive Analytics: A statistical approach on determining Hospital Readmission of Diabetic Patients
Joel C. De Goma and Marjun A. Manahan, School of Information Technology, Mapua University, Manila, Philippines

ID 203  Potential Hazards and Risk Factors Architectural Works in Rental Apartment Building Construction Project to Arrange Goals and Programs Construction Safety
Amirah Syifa, Master's Student, Department of Civil Engineering, University of Indonesia, Depok, West Java, Indonesia
Yusuf Latief, Professor, Department of Civil Engineering, University of Indonesia, Depok, West Java, Indonesia

ID 236  Identification of Risk Factors Causing Delays in The Completion Schedule in The Case Study of Double-Double Track Development (Package A)
Chrys Adrian Lolo, Graduate Student, Department of Civil Engineering, University of Indonesia, Depok, Indonesia
Leni Sagita Riantini, Lecturer, Department of Civil Engineering, University of Indonesia, Depok, Indonesia
Mohammad Ichsan, Lecturer, Management Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 248 Risk Identification in the Controlling Process of Trans Sumatera Toll Road Project Based on PMBOK 6th Edition
Reisha Ananda Putri, Magister Program Student of Construction Management, Department of Civil Engineering, University of Indonesia, Indonesia
Yusuf Latief, Professor of Department of Civil Engineering, University of Indonesia, Indonesia

ID 286 Development of Risk-Based Standardized WBS (Work Breakdown Structure) of Stadium Main Building with Integrated Design-Build Contract for Cost and Time Planning
Andias Mintoharjo, Anggoro Putro and Yusuf Latief, Department of Civil Engineering, University of Indonesia, Depok, West Java, Indonesia

6:00 – 7:45 am, SUNDAY Sustainability Virtual Room 5
Session Chair: Perdana Suteja Putra, Department of Industrial Engineering, University of Indonesia, Jakarta, Indonesia
Zoom Host: Ms. Shipa, UTHM, Malaysia

ID 168 Review of Indonesia’s Residential and Demographic Carbon Emission Using STIRPAT Model
Nathaniel Viandy Dondokambey, Rahmat Nurcahyo and Farizal F., Faculty of Industrial Engineering, Universitas Indonesia, Depok, Indonesia

ID 231 Evaluating the Gaps to Achieve Sustainable Development at the Village Level in Indonesia Using a Systemic Framework
Sayyid Al-Bahr Maulana and Akhmad Hidayatno, Department of Industrial Engineering, Faculty of Engineering, University of Indonesia, Depok, West Java, Indonesia

ID 233 Study of Vertical Greening System Implementation at Flyover Structure in DKI Jakarta
Ganesh Aditya Aryoprawirotama, Fadhilah Muslim, and Leni Sagita Riantini, Department of Civil and Environmental Engineering, University of Indonesia, Depok, West Java, Indonesia

ID 255 The Development of Food Waste Reduction Strategy on the Food Service Sector in Indonesia
AM Bayu Dewantara and Romadhani Ardi, Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Depok, West Java, Indonesia

ID 272 Design of a Food Sharing App Using Kansei Engineering and Fuzzy Linguistic Methods
Perdana Suteja Putra and Amalia Suzianti, Department of Industrial Engineering, University of Indonesia, Jakarta, Indonesia

ID 330 Modeling Causal Factors of In Fresh Produce Supply Chain: Indonesia
Wendy Febriany Mardhiyah, Industrial Engineering Department, Faculty of Engineering, Universitas Indonesia, Depok, Indonesia

ID 378 Manufacture of Cardboard Based on Organic Fibers
Laura Edith Núñez Olmedo, Jorge Alejandro Granados Garza, Arantza Fernández Yañez, Priscila Garza Fernández and Sebastian Garcia Corral, Student of Industrial and Systems Engineering, Tecnológico de Monterrey University, Pachuca, Hidalgo

ID 416 Green Manufacturing and State-Owned Enterprise Effect on China’s Economic Growth
Ferusi Hibanavik, Student, Faculty of International Relations, Bina Nusantara University, Jakarta, Indonesia
Roseno Aji Affandi, Lecturer, Faculty of International Relations, Bina Nusantara University, Jakarta, Indonesia

6:00 – 7:45 am, SUNDAY Operations Management Virtual Room 6
Session Chair: Nita Inderlal Sukdeo, Department of Quality and Operations Management, University of Johannesburg, Gauteng, South Africa
Zoom Host: Ms. Rubana, Central Women’s University, Dhaka, Bangladesh

ID 13 A New Formulation of Multi Item Multi Period Capacitated Lot Sizing Problem with Setup Carryover, Inventory and Backorders (MIMPCLPSWCSI)
RRK Sharma and Syed Moize Ali, Department of Industrial and Management Engineering, IIT Kanpur, India
Mayank Verma, BARC Mumbai, India
Priyanka Modi Verma, NITIE Mumbai, India
KK Lai, President, Chao Yang University of Technology Taiwan

ID 15 New Heuristic for Solving Capacitated Lot Sizing Problem with Setups, Production, Inventory and Back Orders (CLSPWSIPB)
RRK Sharma, Department of IME, IIT Kanpur, India
Vinay Singh, ABV-IIITM Gwalior, India
Saurabh Sontakke, Department of IME, IIT Kanpur, India
KK Lai, President, CYUT Taiwan

ID 61 Building Agile Operations Management in the context of COVID-19 Pandemic: Case of the Oujda University (Morocco)
Abdelkhalak BAKHTI, PhD Student, High School of Technology, Med Ist University
Professor Saïda Filali, Ph.D., High School of Technology, Med Ist University

ID 63 Employee engagement and the impact on productivity in a South African FMCG company
Perumal Ricki Govender and Nita Inderlal Sukdeo, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg, Gauteng, South Africa
Kemlall Ramsaroop Ramdass, Department of Mechanical and Industrial Engineering, Faculty of Engineering, University of South Africa
ID 76  Design of Mass Rapid Transit (MRT) Service Quality Through Analysis of Factor Affecting Passenger Behavior Intention Using PLS-SEM and QFD
Amalia Hasanah Nur Ahlina and Dendi P Ishak, Industrial Engineering Department, Faculty of Engineering, Universitas Indonesia, Depok, Jawa Barat, Indonesia

ID 220  The Effect of Stress on Hospital Employee Performance: Case Study during the Covid-19 Pandemic
Dedi Iskamto, Sekolah Tinggi Ilmu Ekonomi Riau, Indonesia
Jenita, Faculty of Syariah and Law, Universitas Islam Negeri Sultan Syarif Kasim, Indonesia
Daru Asih, Faculty of Economics and Business, Universitas Mercu Buana, Indonesia
Elkana Timotius, Universitas Kristen Krida Wacana, Jakarta, Indonesia
Maidiana Astuti Handayani, Universitas Teknokrat Indonesia, Bandar Lampung, Indonesia
Sulistyo Andarmoyo, Universitas Muhammadiyah Ponorogo, Indonesia
Dahlan Abdullah, Department of Informatics, Universitas Malikussaleh, Aceh, Indonesia

ID 224  Corporate Governance, Audit Committee and Corporate Tax Management
Widaryanti, Sekolah Tinggi Ilmu Ekonomi Pelita Nusantara, Semarang, Indonesia
Leonita Siwyant, University of Muhammadiyah Sukabumi, Indonesia
Dedi Iskamto, Sekolah Tinggi Ilmu Ekonomi Riau, Indonesia
Dahlan Abdullah, Department of Informatics, Universitas Malikussaleh, Aceh, Indonesia

6:00 – 7:45 am, SUNDAY  Lean and Operations  Virtual Room 7
Session Chair: Wardatul Akmam, Rajshahi University of Engineering & Technology, Rajshahi, Bangladesh
Zoom Host: Christian Leon-Cardenas, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

ID 116  An Economic Order Quantity (EOQ) Model for Chemotherapy Drugs Using New Patients’ Arrival Rates
Victor Suhandi, Ph.D. Candidate, Department of Industrial and Systems Engineering, Chung Yuan Christian University, Chungli, Taoyuan City, Taiwan
Ping-Shun Chen, Professor, Department of Industrial and Systems Engineering, Chung Yuan Christian University, Chungli, Taoyuan City, Taiwan

ID 331  Effect of Personality on Newsvendor Decisions
Ümmühan Akbay, Department of Management, Işık University, Istanbul, Turkey
Murat Kaya, Department of Industrial Engineering, Sabancı University, Istanbul, Turkey

ID 292  The Application of Lean Management to Improve Productivity – A Case Study of Kinik Company
James C. Chen, Mu-Hsuan Lee, Chia-Ruei Lee, Yung-Hsin Su and Kung-Chin Koo, Department of Industrial Engineering and Engineering Management, National Tsing Hua University, Hsinchu, Taiwan, R.O.C
Thomas Hsieh and Tony Pai, Kinik Company, New Taipei City, Taiwan, R.O.C

6:00 – 9:45 am, SUNDAY  Plenary I  Onsite Room 1
Session Chair: Dr. Luis Rocha Lona
Zoom Host: Sai Abhijith Medavarapu, Master of Science in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA

ID 528  A Non-delay Algorithm for The Job-shop Scheduling Problem
Nur Ezha Vidawati, Management Trainee Supply Chain, FMCG Company
Puryani and Apriani Soepardi, Department of Industrial Engineering, Faculty of Industrial Engineering, Universitas Pembangunan Nasional Veteran, Yogyakarta, Indonesia

ID 562  Applying Lean Six Sigma to Enhance the Medical devices Repair Process in Public Healthcare Sector in Egypt
Heba Elhaddad, Assistant Professor, Department of Industrial Engineering, Alexandria Higher Institute of Engineering and Technology (AIET), Alexandria, Egypt
Mohamed S. Saleh, Military Technical College, Egyptian Armed Forces, Cairo, Egypt
Lina El-sherif Ismail, Assistant Professor, Department of Industrial and Management Engineering, Arab Academy for Science Technology & Maritime Transport (AASTMT), Alexandria, Egypt
Ayman A. Nassar, Medical Services Administration, Egyptian Armed Forces, Cairo, Egypt
Dr. Luis Rabelo  
Professor  
Department of Industrial Engineering & Management Systems  
University of Central Florida  
Orlando, FL, USA

8:30 – 9:00 am (Sunday, June 12)

Hailey Skoglund  
Data Analyst  
The Walt Disney Company  
Orlando, Florida, USA

9:00 – 9:30 am (Sunday, June 12)

Dr. Luis Rocha Lona  
Lecturer in Operations Management, Business School  
National Polytechnic Institute of Mexico  
México City, Mexico  
Tec de Monterrey, Campus Santa Fe

8:00 – 9:45 am, SUNDAY  
Global Engineering Education I  
Onsite Room 2

Session Chair: Dr. Mario Chauca  
Zoom Host:

8:00 am – 8:30 am (Sunday, June 12)

Dr. SANKAR SENGUPTA  
Professor  
Department of Industrial and Systems Engineering  
Oakland University  
Rochester, Michigan, USA

8:30 am – 9:00 am (Sunday, June 12)

Dr. Mario Chauca  
Professor  
Ricardo Palma University  
Santiago de Surco, Peru

9:00 am – 9:30 am (Sunday, June 12)

Quintcey Smith  
Department of Industrial Engineering and Management Systems  
University of Central Florida  
Orlando, Florida, USA  
Title of her presentation is:

Quality Evaluation of Standardized Testing in U.S. Educational System and Potential Implications on Engineering Education.

8:00 – 9:45 am, SUNDAY  
Competitions  
Onsite Room 3

Session Chair: Competition Chair – Dr. Hayder

Undergraduate Student Paper Competition

ID 73  A Case for Solar Energy System Dashboards to Validate Performance Warranties  
Amaya McNealey, College of Engineering, North Carolina Agricultural and Technical State University, Greensboro, NC, USA  
Esteban A. Soto and Lisa B. Bosman, Purdue Polytechnic Institute, Purdue University, West Lafayette, IN, USA

ID 457  Application of The Bpm-Kraljic Model to Improve Supply Management in An Agroindustrial Mse  
Ljubica Kovac-Alvarado and Camila Rivera-Gómez, Thesis writers, Universidad de Lima, Lima, Perú  
Edilberto Miguel Avalos Ortecho, Professor, Department of Industrial Engineering, Universidad de Lima, Lima, Perú

Graduate Student Paper Competition

ID 50  Holistic QA: Software Quality Assurance for the Machine Learning Era  
Shane Downing and M. Affan Badar, Department of Applied Engineering and Technology Management, Indiana State University, IN, USA

ID 81  Fine-Tuning the Parameters for Solving the Multi-Objective D-FACTS Optimal Allocation Problem  
Eduardo Castillo Fatule, Department of Industrial, Manufacturing and Systems Engineering, The University of Texas at El Paso, Texas, USA  
Yuanrui Sang, Department of Electrical and Computer Engineering, The University of Texas at El Paso, El Paso, TX, USA  
Jose Espiritu, Department of Mechanical and Industrial Engineering, Texas A&M University, Kingsville, Texas, USA
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<th>Authors</th>
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<tr>
<td>490</td>
<td>Application of Network Models to Assist in Data Science Curriculum Using Program and Course Learning Outcomes</td>
<td>Orel Yoshia, Graduate Program in Computer Science – Data Science, Florida Polytechnic University, Lakeland, Florida, Dr. Reinaldo Sanchez-Arias, Assistant Chair Department of Data Science and Business Analytics, Assistant Professor of Data Science, Florida Polytechnic University, Florida, USA</td>
<td>Dr. Reinaldo Sanchez-Arias, Assistant Chair Department of Data Science and Business Analytics, Assistant Professor of Data Science, Florida Polytechnic University, Florida, USA</td>
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<td>200</td>
<td>Ambulatory Staffing Optimization through the Development and Implementation of a Staffing Tool in a Community Based Primary Care and Specialty Clinic Setting</td>
<td>Pawan Bhandari, Bijoy Mathew, Ryan Johnson, Lindsay Hennek, Jennifer Mueller, Lisa McConnell, Tiffany Schaff, Heather Slama, Michael Pederson, Jessica Runge, Kelly Ashley, Angela Stransky, Daniel Muldoon, and Cassondra Renneke, Mayo Clinic Health System – Southwest Minnesota Region, Mankato, MN, USA M. Affan Badar, Department of Applied Engineering and Technology Management, Indiana State University, Terre Haute, IN, USA</td>
<td>Pawan Bhandari, Bijoy Mathew, Ryan Johnson, Lindsay Hennek, Jennifer Mueller, Lisa McConnell, Tiffany Schaff, Heather Slama, Michael Pederson, Jessica Runge, Kelly Ashley, Angela Stransky, Daniel Muldoon, and Cassondra Renneke, Mayo Clinic Health System – Southwest Minnesota Region, Mankato, MN, USA M. Affan Badar, Department of Applied Engineering and Technology Management, Indiana State University, Terre Haute, IN, USA</td>
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<tr>
<td>521</td>
<td>Effects of Boredom on the Academic Engagement of Students during Online Class</td>
<td>Dr. Tayeb Brahimi, Assistant Professor, Department of Electrical and Computer Engineering (ECE) Effat University, Jeddah, Saudi Arabia</td>
<td>Dr. Tayeb Brahimi, Assistant Professor, Department of Electrical and Computer Engineering (ECE) Effat University, Jeddah, Saudi Arabia</td>
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<td>522</td>
<td>Measuring the Learning Environmental Satisfaction of Students during Online Class</td>
<td>Dr. Reinaldo Sanchez-Arias, Assistant Chair Department of Data Science and Business Analytics, Assistant Professor of Data Science, Florida Polytechnic University, Florida, USA</td>
<td>Dr. Reinaldo Sanchez-Arias, Assistant Chair Department of Data Science and Business Analytics, Assistant Professor of Data Science, Florida Polytechnic University, Florida, USA</td>
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<td>495</td>
<td>Mental Health Analysis in Tech Workplace</td>
<td>Md. Milton Uddin, Department of Electrical Engineering, The University of Texas at Tyler, Tyler, Texas, USA Aafia Farjana and Muntasar Mamun, Department of Computer Science, The University of Texas at Tyler, Tyler, Texas, USA</td>
<td>Md. Milton Uddin, Department of Electrical Engineering, The University of Texas at Tyler, Tyler, Texas, USA Aafia Farjana and Muntasar Mamun, Department of Computer Science, The University of Texas at Tyler, Tyler, Texas, USA</td>
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<td>575</td>
<td>Development of Smart Sustainable City Conceptual Design for Indonesia’s New Capital City</td>
<td>Rafly Muzady and Mohammed Ali Berawi, Department of Civil and Environmental Engineering University of Indonesia, Depok, West Java, Indonesia</td>
<td>Rafly Muzady and Mohammed Ali Berawi, Department of Civil and Environmental Engineering University of Indonesia, Depok, West Java, Indonesia</td>
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<td>155</td>
<td>Eliminating Injuries by Utilizing Self-Loading Equipment for Adaptive Snow-Sports</td>
<td>Dr. Elizabeth O’Neill, Keith McDade, and Tiffany Fuzak, Buffalo State College, United States</td>
<td>Dr. Elizabeth O’Neill, Keith McDade, and Tiffany Fuzak, Buffalo State College, United States</td>
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**Session Chair:** Dr. Elizabeth O’Neill, Buffalo State College, United States

**Zoom Host:** Curzio Pagliari, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

**Zoom Host:** Ms. Shipa, UTHM, Malaysia

**Zoom Host:** Curzio Pagliari, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

**Zoom Host:** Curzio Pagliari, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy
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<td>Determinant Factors in Developing a Micro-Pension Model for Self-Employed Workers in Malaysia</td>
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<td>Design and Development Website of Malang City Culinary as a Strategy to Improve Malang City Culinary Industry</td>
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**Saturday, June 11, 2022**

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<th>Time</th>
<th>Session</th>
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<td>8:00 – 9:45 am, SUNDAY</td>
<td>Operations Management</td>
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<td>Virtual Room 6, Zoom Host: Ms. Rubana, Central Women's University, Dhaka, Bangladesh</td>
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<td>341</td>
<td>Fifth Generation Wireless Network Usage in the Operations of the Food Industry: Barriers and Benefits</td>
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<td>376</td>
<td>Execution of Plan-Do-Check-Act and Lean in Manufacturing Line: A Case of Foundry Industry of South Africa</td>
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<td>380</td>
<td>Planning and Controlling Raw Material of Balado Seasoning Using Material Requirements Planning (MRP) Method</td>
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<td>434</td>
<td>Resilience of Assembly Lines in Automotive Industry</td>
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<td>471</td>
<td>The Effect Development, Compensation, and Organizational Justice on Intention to Quit in Insurance Company X</td>
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<td>488</td>
<td>Effect of Work Environment, Work Motivation and Transformational Leadership on Employee Performance in PT. XYZ</td>
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<td>543</td>
<td>Hospital Bed Availability Forecasting During a Health Crisis</td>
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**Sunday, June 12, 2022**

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<td>8:00 – 9:45 am, SUNDAY</td>
<td>Case Studies</td>
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<td>Virtual Room 7, Zoom Host: Christian Leon-Cardenas, School of Industrial Engineering and Engineering Management, Mapua University Manila, Philippines</td>
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<td>536</td>
<td>The Role of Identity in the Possibility of Normalization between Indonesia and Israel</td>
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<td>Students' Experiences Undertaking New Colombo Plan (NCP) Program in Indonesia: Improving Australia's Public Diplomacy?</td>
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<td>542</td>
<td>The Role of Middle Power Country from Global-South in Multilateral Climate Change Negotiation Conference: Indonesia Role in Katowice Climate Change Conference</td>
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<td>543</td>
<td>Shared Challenges and Opportunities in Ending Child Marriage in South Asia: The Case of India and Bangladesh</td>
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<td>545</td>
<td>Colorism “Ideology”: The Legacy of Colonial Mentality in The Jakarta’s Gen-Z Mixed-Race</td>
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<td>546</td>
<td>France -UK Joint Border Management in Dealing with the Phenomenon of Illegal Immigrants in 2003-2016</td>
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June 12 (Sunday) - Session: 10:00 am – 1:00 pm
Onsite Room 1 (Ballroom) / Virtual Room 1

Keynote Speakers
Conference Welcome and Opening: Sunday, June 12, 2022, 10:00 – 10:20 am

Opening Keynote I: Sunday, June 12, 2022, 10:20 – 11:00 am

Dr. Randy Avent
President
Florida Polytechnic University
Florida, USA

Keynote II: Sunday, June 12, 2022, 11:00 – 11:40 am

Kay M. Stanney, Ph.D.
CEO and Founder, Design Interactive, Inc.
Member, National Academy of Engineering (NAE)
Orlando, Florida, USA

Keynote III: Sunday, June 12, 2022, 11:40 – 12:20 pm

Professor Alex Frino
Deputy Vice-Chancellor (Global Strategy)
University of Wollongong
Wollongong, NSW, Australia

Keynote IV: Sunday, June 12, 2022, 12:20 – 1:00 pm

Ms. Jessica Ascough
Chief Software Architect, AI Solutions Architect, Data Scientist
L3Harris Technologies
Florida, USA

1:00 – 2:00 pm – Lunch Break (Provided)
2:00 pm – 2:15 pm
Dr. Cindy Young, PMP, LSS MBB, CMQ-OE
Founder/CEO
CJ Young Consulting LLC
Chesapeake, Virginia USA

2:15 pm – 2:30 pm
Terra Vanzant Stern, PhD
LSS MBB, PMP®
CEO of Simple, Smart, Decision-Making dba SSD Global Solutions
Conifer, Colorado USA

2:30 pm – 2:45 pm
Ms. Vic Wilson, LSS MBB, PMP, Agile PM
CEO
Vic Wilson Consulting LLC
Hertford, NC USA

2:45 pm – 3:00 pm
Patricia (Pat) Tyre, PMP®, ACP, PSM, LSSMBB
Managing Director
Business Excellent Group, Inc.
Norwalk, Connecticut, USA

2:00 – 3:45 pm, SUNDAY Global Engineering Education II Onsite Room 2

Special Session on Higher Education in Technology Management

Session Chair:
Dr. M. Affan Badar, PhD, CPEM
Professor and Former Chair
Department of Applied Engineering and Technology Management
Indiana State University
Terre Haute, Indiana, USA

Speakers
Dr. Kamal Shahrabi
President and Dean of Faculty
RIT Kosovo (A.U.K)

Dr. Arezou Harraf
Head of the Department of Business Studies
Box Hill College Kuwait
Kuwait

Aixi Zhou, PhD, PE, FSFPE
Chair and Professor
Dept. of Applied Engineering Technology
College of Science and Technology
North Carolina A&T State University
Greensboro, NC, USA

Title: Equipping Technology Management Students with Advantageous Technical Skills

2:00 – 3:45 pm, SUNDAY Competitions Onsite Room 3

Session Chair: Dr. Hayder Zghair, Southern Arkansas State University

Lean Six Sigma Competition

ID 186    Lean Healthcare Transformation Model: Success story from Oman
Yousuf Al Khamisi, Sultan Qaboos University, Oman

ID 514    Product Development by Means of Industrial-Design Structure (IDeS) Method. Studies for Future Mobility Solutions
Christian Leon-Cardenas, Leonardo Frizziere, Giulio Galile, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna Viale Risorgimento, Bologna, Italy
Ahad Ali and Don Reimer, A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering, Lawrence Technological University
ID 554 Case Study on Using a Time Study Project to Improve Manufacturing Efficiency and Safety  
Dr. Mahmoud Al-Odeh, Professor, School of Technology, Bemidji State University, Bemidji, MN, USA

Supply Chain and Logistics Competition

ID 337 A Hierarchical Fuzzy TOPSIS Methodology for Chain Store Location Selection with a Case Study in Ofogh Kourosh Chain Stores during COVID-19 Pandemic  
Seyed Sina Miri Nargesi, Department of Industrial Engineering, Faculty of Engineering, Islamic Azad University, Science & Research Branch, Tehran, Iran  
Hamidreza Mozaffari Gilani, Department of Civil Engineering, Semnan Branch, Islamic Azad University, Semnan, Iran  
Commercial Deputy of CEO, Ofogh Kourosh Chain Stores, Iran

ID 345 Marketing Sustainability Investment  
Wenqing Zhang, Yorkville University, Canada

Doctoral Dissertation Competition

ID 346 Navigating with Sharks: How the Persuasive Usability Framework Help To Create Successful Phishing Emails  
Erica Castilho-Grao, Graduate Researcher, Department of Industrial Engineering and Management Systems, University of Central Florida  
Orlando, Florida, USA

2:00 – 3:45 pm, SUNDAY  
Engineering Education  
Virtual Room 4

Session Chair: Albertus Retnanto, Texas A&M University at Qatar  
Zoom Host: Curzio Pagliari, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

ID 90 Systematic Improvement of a Product: A Case Study in Engineering Design Education  
Karl Hain and Christoph Rappi, Faculty of Mechanical Engineering and Mechatronics, DIT Deggendorf Institute of Technology, Deggendorf, Bavaria, Germany

ID 320 Is an Academic Degree Required for a Successful Product Manager?  
Murad Andejany, Associate Professor, University of Jeddah, College of Engineering, Department of Industrial and Systems Engineering, Jeddah, Saudi Arabia

ID 121 Integration Between Islamic Studies and Wash Entrepreneurship Is A Key Factor to Achieve Social-Environmental Impact; Case Study of Jordan  
Authors: Motaz Al-Thaher, PhD. Student - Kulliyyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University of Malaysia, Selangor - Malaysia  
Operation Manager - SOLVillion, Amman - Jordan  
Aia Abul-Haj, Master Student - Kullyah of Architecture and built Environment, Business Development Manager - SOLVillion, Amman - Jordan

ID 150 Clinical Engineering: Curriculum Development at Miami University  
Lei Kerr and Shashi Lalvani, Professor, Chemical, Paper and Biomedical Engineering, Miami University, Oxford, OH

ID 463 Synchronous vs. Face-to-Face Instructions: A Comparative Study and Some Lessons Learned of Teaching Undergraduate Engineering Subject in the US vs. Overseas  
Albertus Retnanto, Ph.D., Professor, Petroleum Engineering, Texas A&M University at Qatar, Doha, Qatar  
Hamid R. Parsaei, Ph.D., P.E., Professor, Department of Industrial and Systems Engineering, Texas A&M University, College Station, TX, USA  
Boback Parsaei, Integrated Technology Systems, Inc., Houston, Texas, USA

June 12 (Sunday) - Session: 4:00 – 5:45 pm – Room 1

Presidential Panel on the Future of the IEOM Discipline

Panel Chair:  
Dr. Abu Masud, P.E.  
Emeritus Professor  
Department of Industrial and Manufacturing Engineering  
Wichita State University  
Kansas, USA

Panel Co-Chair:  
Hamid Parsaei  
Professor Hamid Parsaei, Ph.D., PE  
Fellow, IISE, ASEE, SME, IEOM  
Professor, Department of Industrial and Systems Engineering
IEOM Orlando Conference  
PARALLEL SESSIONS  
June 11-14, 2022

Interim Director, College of Engineering Accreditation and Assessment  
Texas A&M University  
College Station, Texas, USA  
IEOM President, 2021-2023; IEOM Vice President, 2019-2021

Panel Speakers

Dr. Waldemar Karwowski  
Pegasus Professor and Chairman  
Department of Industrial Engineering and Management Systems  
University of Central Florida  
Orlando, Florida, USA

Dr. Shahram Taj  
Chair and Professor  
Department of Data Science & Business Analytics  
Florida Polytechnic University  
Lakeland, FL, USA

Dr. Abdelaziz Berrado  
Professor and Chair, Department of Industrial Engineering  
The Ecole Mohammadia d’Ingénieurs (EMI)  
Rabat, Morocco

4:00 – 5:45 pm, SUNDAY  
Technical Presentations  
Onsite Room 3

Session Chair: Dr. Hayder Zghair, Southern Arkansas State University

Open Onsite Session

June 13 (Monday)

June 13 (Monday) - Session: 6:00 – 7:45 am

6:00 – 7:45 am, MONDAY  
Innovation  
Virtual Room 1

Session Chair: Mohamad Trio Febriyanto, Universiti Tun Hussein Onn Malaysia, Johor, 86400 Batu Pahat, Malaysia  
Zoom Host: Sai Abhijith Medavarapu, Master of Science in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA

ID 234  
Scientometric Analysis of Digital Entrepreneurship Through Bibliometric Visualizing in the Last 20 Years  
Fairuz Iqbal Maulana, Computer Science Department, Bina Nusantara University, Jakarta, Indonesia  
Agung Purnomo and Febby Candra Pratama, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia  
Vandha Pradwiyasmi Widartha, Information System of Industrial Engineering Faculty, Telkom University, Bandung, Indonesia  
Rahman Anfuddin, Department of Electrical Engineering, University of Merdeka Malang, Malang, Indonesia

ID 253  
The Role of Entrepreneurial Marketing on Business Performance Mediated by Competitive Advantage for MSMEs in Indonesia  
Mohamad Trio Febriyanto, Juzaimi Nasuredin and Umi Kartini Rashid, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Johor, Batu Pahat, Malaysia

ID 254  
The Effect of Entrepreneurial Marketing on Business Performance Moderated by Environmental Turbulence on MSMEs in Indonesia  
Mohamad Trio Febriyanto, Juzaimi Nasuredin and Umi Kartini Rashid, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Johor, 86400 Batu Pahat, Malaysia

ID 306  
Analysis on the Impact and Needs of Entrepreneurial Ecosystem from Creativepreneurship Students at Binus Bandung  
Puji Prabowo, Imanda Dea Sabiella, Yuda S. Sjaerodji, Jessica Chiedi and Cindy Dewi Wulaya, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 310  
Creative Ecosystem for Supporting Entrepreneurial Skill  
Puji Prabowo and Yuda S. Sjaerodji, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 323  
Patterns of MSMEs in Finding Business Opportunities  
Puji Prabowo, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 324  
Reduce fat device  
Rodrigo, Arenal Tec, Mexico

6:00 – 7:45 am, MONDAY  
Entrepreneurship  
Virtual Room 2

Session Chair: Azlina Abu Bakar @ Mohd, Faculty of Human Development, Sultan Idris Education University, Perak, Malaysia  
Zoom Host: Yordanos Jewani, Florida Polytechnic University, Lakeland, Florida, USA

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<th>ID</th>
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<tr>
<td>ID 112</td>
<td>Towards the Development of MetaMed: A Blockchain-based EHR System Integrated with a Browser-based Web Application for Interhospital Communication and Patient Data Ownership Empowerment</td>
<td>Mary Jane C. Samonte, School of Information Technology, Mapúa University, Manila, Philippines, Jim Daniel A. Giron, Ma. Michelle A. Pantoja and Angela Marie D. Tobias, School of Information Technology, Mapua University, Manila, Philippines</td>
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<tr>
<td>ID 202</td>
<td>User Interface Design Review of The Waste Manager Application “Octopus”</td>
<td>Lutfi Tri Artmai, Hindam Basith Rafiqi, Saffitri Aprillia Putri, Donna Carolinia, Uzda Nabilah Shabiriani, and Wahyukurnia Dewi, Visual Communication Design, Department of School of Design, Jakarta, Indonesia, Mohammad Hazim Amir Nordin and Azlina Abu Bakar, School of Business and Management, Sultan Idris Education University, Perak, Malaysia</td>
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<tr>
<td>ID 206</td>
<td>Design and Content Validity on Observation Behavior Checklist for Biomorphic Art Implementation in Mentor and Mentee Program</td>
<td>Rayner Andreas Purba and Dendi P. Ishak, Department of Industrial Engineering, University of Indonesia, Depok, Indonesia, Muhammad Hazim Amir Nordin and Azlina Abu Bakar, School of Business and Management, Sultan Idris Education University, Perak, Malaysia</td>
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<tr>
<td>ID 201</td>
<td>Integration of Conjoint Analysis and Quality Function Deployment for Design Development of Battery Electric Vehicle in Indonesia</td>
<td>Abdurrahman, Doctoral Student of Science in Management, School of Business and Management, Bandung Institute of Technology, Bandung, Indonesia, Mohammad Hazim Amir Nordin and Azlina Abu Bakar, School of Business and Management, Sultan Idris Education University, Perak, Malaysia</td>
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<tr>
<td>ID 187</td>
<td>Designing a Performance Management System for the Digital Transformation of the Indonesian Banking Industry</td>
<td>Abdurrahman, Doctoral Student of Science in Management, School of Business and Management, Bandung Institute of Technology, Bandung, Indonesia, Mohammad Hazim Amir Nordin and Azlina Abu Bakar, School of Business and Management, Sultan Idris Education University, Perak, Malaysia</td>
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<td>ID 201</td>
<td>Development of Mobile Application Indonesia Halal Tourism</td>
<td>Mita Purbasi Wahidiat and Donna Carolinia, Visual Communication Design, Department of School of Design, Jakarta, Indonesia, Mohammad Hazim Amir Nordin and Azlina Abu Bakar, School of Business and Management, Sultan Idris Education University, Perak, Malaysia</td>
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<td>ID 438</td>
<td>Digital Transformation in the Property Management Industry: A Systematic Literature Review</td>
<td>Prasetya Cahya S, Information Systems Department, School of Information System, Bina Nusantara University, Jakarta, Indonesia, Mohammad Hazim Amir Nordin and Azlina Abu Bakar, School of Business and Management, Sultan Idris Education University, Perak, Malaysia</td>
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6:00 – 7:45 am, MONDAY  
**Case Studies**

| ID 570 | Service Quality’s Influence on Loyalty with Satisfaction as Variable Mediation, on E-Commerce Shopee Customers | Ridho Chairian, Mahendra Fakhri and Hanifah Putri Elisa, School of Communication and Business Telkom University, Bandung, Indonesia |
| ID 571 | The Effect of Discounts on Interest, Election, and Satisfaction with Shopee Food Services | Giovanni Anggasta Aryasatya and Mahendra Fakhri, School of Communication and Business Telkom University, Bandung, Indonesia |
| ID 574 | Sales of Imported Goods during the Pandemic in Cimol Gedebage Bandung Market | Izmy Wulandari and Anita Silvianita, School of Communication and Business Telkom University, Bandung, Indonesia |
| ID 548 | System Improvement of Maintenance Procedure for MB Manufacturing LLC | Enique D. Salazar and Grace Lorraine Intal, School of Industrial Engineering and Engineering, Management, Mapúa University, Intramuros, Manila, Philippines |
| ID 547 | Investigation of the Emerging Materials Based High-Efficiency CdTe Solar Cell | Aamar Shabir and Muhammad Ullah, Department of Electrical and Computer Engineering, Florida Polytechnic University, Lakeland, Florida, USA |
| ID 546 | Gender and COVID-19 Vaccines in the Media: Evidence from Indonesia | Agnes Isna Kuswondo and Ella Syafputri Prihatini, Ph.D., International Relations Department, Bina Nusantara University, Jakarta, Indonesia |

6:00 – 7:45 am, MONDAY  
**Data Analytics**

| ID 480 | Factors Affecting Internet Financial Reporting on Banks Listed on Indonesian Stock Exchange 2013-2017 | Marsia Michelle, Teddy Lim and Aries Wicaksono, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia |
| ID 484 | Analysis of Factors Influencing IPO Underpricing on Companies Listed in Indonesia Stock Exchange | Illen Meilinda and Yen Sun, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia |
| ID 485 | Effect of Financial Performance and Investment Opportunity Set on Accounting Conservatism in Consumption Goods Manufacturing Companies Listed on Indonesia Stock Exchange (2014-2016) | Martias Ceasia Bagaskara and Pariang Siagian, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia |
ID 448  Implementation of Augmented House of Quality in Designing Multifunction Bag for Bicycle
Ezra Peranginangin, Assistant Professor, Industrial Engineering Department, Binas University, Jakarta, Indonesia
Putri Melinda, Industrial Engineering Department, Binas University, Jakarta, Indonesia

ID 470  The Effect of Emotional Intelligence and Cognitive Ability on Project Manager Success and Gender as The Moderator
Alyah Nurjanah Aswin, Youngky Pratama and Tinjung Desy Nursanti, Management Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 152  Experimental Analysis Using Design of Experiments Methodology to Minimize the Power Loss and Response Delay in Electric Circuits –A Case Study on NPN Circuit
P. Harisha, Assistant Professor, Department of Mechanical Engineering, Vignan’s Institute of Information Technology, Visakhapatnam, India. Shabhana Assistant Professor, Department of Mechanical Engineering, GITAM University, Visakhapatnam, India.

ID 327  Design and Implementation of a Selective Attention Computerized Test
Catalina Astudillo-Rodriguez and Patricia Ortega-Chasi, Computer Science Engineering School, Universidad del Azuay, Cuenca, Ecuador
Martha Cobos and Alexandra Bueno, Psychology School, Universidad del Azuay, Cuenca, Ecuador
Manuel Freire, Business Administration Faculty, Universidad del Azuay, Cuenca, Ecuador

6:00 – 7:45 am, MONDAY  Business Management  Virtual Room 5
Session Chair: Fernando Romana, Atlântica, Portugal
Zoom Host: Ms. Shipa, UTHM, Malaysia

ID 353  Financial Performance of Indonesian Banking Industry: Do liquidity, asset quality and capital matter?
Firly Irhamni, Denis Fidita Karya, Mohamad Yusak Anshori and Rizki Amalia Elfita, Faculty of Economic, Business and Digital Technology, Universitas Nahladul Ulama Surabaya, Indonesia

ID 354  The Role of CSR Disclosure as Moderation on the Relationship between Environmental Performance and Corporate Financial Performance
Firly Irhamni, Mohamad Yusak Anshori, Denis Fidita Karya and Rizki Amalia Elfita, Faculty of Economic, Business and Digital Technology, Universitas Nahladul Ulama Surabaya, Indonesia

ID 398  Business Strategy to Develop New Integrated Logistic Base Case of Pt Pertamina Trans Kontinental
Steven Romario Temanta Tarigana and Yudo Anggorob, School of Business and Management, Institut Teknologi Bandung, Indonesia

ID 404  Improving E-Commerce Adoption Through Behaviour Influence and Organizational Culture
Dicky Hida Syahchari and Diena Dwidienawati, Management Department, Binas University, Jakarta, Indonesia
Yopy Maulana, Tourism Destination Department, Faculty of Digital Communication and Hospitality and Tourism, Bina Nusantara University, Jakarta, Indonesia

ID 428  How Transformational Leadership influences Individual Resilience and Team Resilience in Project Management
Diena Dwidienawati, Mohammad Ichsan and Dicky Hida Syahchari, Management Program, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 443  Fostering SMEs Performance Through Entrepreneurial Capability and Technology Innovation
Dicky Hida Syahchari, Engkos Achmad Kuncoro and Hardjianto Saroso, Management Department, Binas University, Jakarta, Indonesia

ID 461  Analyzing and Prioritizing the Enablers of Online Impulse Buying Behavior: Application of SOR Theory
Vaibhav Sharma and Akash Saharan, Ph.D. Research Scholar, Jindal Global Business School, O. P. Jindal Global University, India
Ateequr Rahman, Ph.D. Research Scholar, School of Management & Entrepreneurship, Indian Institute of Technology, Jodhpur, India
K. K. Lai, Professor & Vice President, Department of Business Administration, Chaoyang University of Technology Taichung, Taiwan

ID 21  Business Process of Small and Medium Portuguese Family Businesses A Reindustrialization Case Study
Fernando Romana, Atlântica, Portugal

6:00 – 7:45 am, MONDAY  Data Analytics  Virtual Room 6
Session Chair: H.P.N. Hettiarachchi, Department of Industrial Management, Faculty of Science, University of Kelaniya, Sri Lanka
Zoom Host: Ms. Rubana, Central Women’s University, Dhaka, Bangladesh

ID 19  Dry Bean Classification using Machine Learning Techniques
Julekha Hussain Ranta, Graduate Student, Department of Computational Engineering, Mississippi State University, Starkville, Mississippi, USA
Fahtimah Islam, Graduate Student, Department of Electrical and Computer Engineering, Mississippi State University, Starkville, Mississippi, USA
Raed Jaradat, Associate Professor, Department of Industrial & Systems Engineering, Mississippi State University, Starkville, Mississippi, USA
Terril C. Falls, Associate Director, Institute for Systems Engineering Research (ISER), Mississippi State University, Starkville, Mississippi, USA

ID 59  Data Science and Analytics: A Data Driven Decision Making Approach for Business and Engineering
Amar Sahay, Ph.D.

J.S.B. Geronimo and M.J.C. Samonte, MAPUA University, Philippines
ID 197  Analyzing Storynomics Research with Bibliometric Approach  
Donna Carolinina, Visual Communication Design, Department of School of Design, Jakarta, Indonesia  
Fairuz Iqbal Maulana, Computer of Science, Department of School of Computer Science, Jakarta, Indonesia  
Bigraph Triangga and Helena Hanindy Kartika Putri, Entrepreneurship Business Creation, Department of Business School, Bina Nusantara University, Jakarta, Indonesia

ID 209  Non-Fungible Token (NFT) Overview Research Trends  
R Aditya Kristamtomo P, Visual Communication Design, Department of School of Design, Bina Nusantara University, Jakarta, Indonesia  
Donna Carolinina, Computer of Science, Department of School of Computer Science, Bina Nusantara University, Jakarta, Indonesia  
Fairuz Iqbal Maulana, Entrepreneurship Business Creation, Department of Business School, Bina Nusantara University, Jakarta, Indonesia

ID 75  Reducing Imposter Detection Time of Web Applications Using Continuous Authentication  
H.P.N. Hettiarachchi, Department of Industrial Management, Faculty of Science, University of Kelaniya, Sri Lanka

ID 130  Social Engineering Attack Awareness and Preparation Training Program Design: A Case study  
Celestial, Alexandra Mikaela G., Gonzales, Jezel D., Medina, Emmanuel Carlos T., Seguin, Eugene B. and Blancaflor, Eric B., School of Information Technology, Mapua Univ. Makati, Philippines

6:00 – 7:45 am, MONDAY  
Business Management  
Virtual Room 7

Session Chair:  
Zoom Host: Christian Leon-Cardenas, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

ID 604  Comparison of Excavators based on Productivity for Land Excavation Work in a Toll Road Project  
W. Ilahi, A. B. Putra and C.A. Palevi, Civil Engineering Department, Faculty of Engineering, Bina Nusantara University, Jakarta, Indonesia

ID 605  Implementation of Smart Home Technology in Notary Office to Enhance Client Trust  
Aditya Zaidan Falah, Andi Pramono, Elizabeth Phoebe Jead and Lucretia Jessica Miranda Setiawan, Interior Design Department, School of Design, Bina Nusantara University, Jakarta, Indonesia

ID 606  ATUMICS Approach to Preserve Candi Kidal’s Relief for Sustainability a Cultural Heritage Site  
Andi Pramono and Ida Bagus Ananta Wijaya, Interior Design Department, School of Design, Bina Nusantara University, Jakarta, Indonesia

ID 607  Sustainable Performance: Understanding the Concept of Consumer Trust to E-Commerce  
Doni Purnama Alamsyah, Sandy Setiawan and Mira Rustine, Entrepreneurship Department, BINUS Business School, Undergraduate Program, Bina Nusantara University, Indonesia

ID 608  Developing Foot Lock for Public Toilet Facilities  
Agustina Christiani and Shem Lemuel, Industrial Engineering Study Program, Universitas Pelita Harapan, Lippo Village, Tangerang, Indonesia

ID 609  Community Participation in Urban Development in Realizing an Elderly Friendly City in Indonesia  
Wahyu Sardjono, Information Systems Management Department, BINUS Graduate Program – Master of Information Systems Management, Bina Nusantara University, Indonesia  
Haryoto Kusnpoutranto, Professor, Department of Environmental Health, Faculty of Public Health, University of Indonesia, Indonesia  
Johan, School of Information systems, Bina Nusantara University, Indonesia  
Samudra Sukardi, Post Graduate Program, Study Program of Management Science, Faculty of Economic and Business, University of Indonesia, Indonesia

ID 610  Flight Operation Efficiency through Improved Passenger Baggage Tracking Services  
Wahyu Sardjono, Information Systems Management Department, BINUS Graduate Program – Master of Information Systems Management, Bina Nusantara University, Indonesia  
Haryoto Kusnpoutranto, Professor, Department of Environmental Health, Faculty of Public Health, University of Indonesia, Indonesia  
Johan, School of Information systems, Bina Nusantara University, Indonesia  
Hargo Utomo, Department of Management, Faculty of Economics and Business, Universitas Gadjah Mada, Indonesia  
Samudra Sukardi, Post Graduate Program, Study Program of Management Science, Faculty of Economic and Business, University of Indonesia, Indonesia

ID 611  Performance Measurement Model of Environmentally Friendly Service Quality to Customer Using System Dynamics Approach  
Wahyu Sardjono, Information Systems Management Department, BINUS Graduate Program – Master of Information Systems Management, Bina Nusantara University, Indonesia  
Haryoto Kusnpoutranto, Professor, Department of Environmental Health, Faculty of Public Health, University of Indonesia, Indonesia  
Johan, School of Information systems, Bina Nusantara University, Indonesia  
Hargo Utomo, Department of Management, Faculty of Economics and Business, Universitas Gadjah Mada, Indonesia  
Samudra Sukardi, Post Graduate Program, Study Program of Management Science, Faculty of Economic and Business, University of Indonesia, Indonesia

ID 619  The Relationship between House Prices and Economic Growth in Malaysia: An Empirical Analysis  
Saima Afsheen, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Parit Raja, Johor, Malaysia  
Dr. Mohd Lizam Mohd Diah, Professor (Associate), Department of Real Estate Management, Universiti Tun Hussein Onn Malaysia, Parit Raja, Johor, Malaysia
June 13 (Monday) - Session: 8:00 – 9:45 am

**8:00 – 9:45 am, MONDAY**  
**Plenary II**  
**Onsite Room 1**

Session Chair: Paul Odomirok  
Zoom Host: Sai Abhijith Medavarapu, Master of Sciene in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA  

8:00 am – 8:30 am (Monday, June 13)

Eric Ayanegui, CPMM, CRL  
Director Operations Engineering  
Cintas Corporation  
Houston, Texas, USA  

8:30 am – 9:00 am (Monday, June 13)

Joseph Akyeampong, PhD  
Human Factors Engineering Consultant  
Amgen  
Fort Lauderdale, Florida, United States  

9:00 am – 9:30 am (Monday, June 13)

Paul Odomirok  
President and CEO  
Performance Excellence Associates, Inc.  
St Augustine, Florida, USA  

**8:00 – 9:45 am, MONDAY**  
**Industry Solutions I**  
**Onsite Room 2**

Session Chair: Dr. James Mennie, Florida Polytechnic University  
Zoom Host:  

8:00 pm – 8:20 am

Youssif Al-Nashif, Ph.D.  
Computer Science  
Florida Polytechnic University  
Lakeland, Florida, USA  

8:20 pm – 8:40 am

Dr. James Mennie  
FIPR Business Director  
Florida Polytechnic University  
Lakeland, Florida, USA  

8:40 am – 9:00 am

Mustafa Ilhan Akbas, Ph.D.  
Computer Science Department  
Embry-Riddle Aeronautical University  
Daytona Beach, Florida, USA  

9:00 am – 9:20 am

Ala’ J. Alnaser, Ph.D.  
Applied Mathematics  
Florida Polytechnic University  
Lakeland, Florida, USA  

9:20 am – 9:40 am

Amy Augustyniak  
Senior Manager, Supply Chain Analytics  
SaddleCreek Logistics  
Lakeland, Florida, USA  

**8:00 – 9:45 am, MONDAY**  
**Operations Management**  
**Onsite Room 3**

Session Chair: Husam Kaid, King Saud University, Saudi Arabia  

ID 66  
*A collective approach for the integration of corporate social responsibility in SMEs and proposal of a grid of indicators specific to SMEs*  
Anissa Frini, Management science department, Université de Québec at Rimouski, Quebec, Canada
ID 252  Globalization Balancing Drivers and Network Resilience Practice in the Digital Transformation Era: An Empirical Study
Xiyue Deng, Assistant Professor, Management and Marketing Department, Southern Illinois University – Edwardsville, Edwardsville, IL, USA

ID 232  Jointly Integrated Imperfect Maintenance to Energy Production Strategy for Wind Turbine System
Zied Hajiej, A. Professor, LGIPM, Lorraine University, Metz, France
Nidhal Rezg, Professor, LGIPM, Lorraine University, Metz, France

ID 78  The Economic Logic of Open Science in Large-Scale International Projects
Marco Vincenzi, Senior Lecturer, Department of Economics, Peter T. Paul College of Business and Economics, University of New Hampshire Durham, New Hampshire, USA

ID 95  An effective Hybrid Petri net and Tabu Search for Parallel Machines Scheduling with Availability Constraint
Husam Kaid, King Saud University, Saudi Arabia

8:00 – 9:45 am, MONDAY  e-Business, e-Manufacturing and IT  Virtual Room 4
Session Chair: Hanan Majri, NUMERIX Laboratory, University of Quebec, École de Technologie Supérieure, Montreal, Quebec, Canada
Zoom Host: Martina Marruganti, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

ID 198  Analysis of the Impact of Mobile-Based Property Management Applications Implementation on Service Satisfaction for Middle-Class Apartment in Jakarta
Prasetya Cahya S, Information Systems Department, School of Information System, Bina Nusantara University, Jakarta, Indonesia

ID 421  Driving Factors Analysis of the Continuance Intention and Brand Loyalty of the Mobile Food Ordering Application
Cindy Natasha Lalita and Amalia Suzianti, Department of Industrial Engineering, Universitas Indonesia, Depok, West Java, Indonesia

ID 373  Facing the Pandemic through IMC: Wedding Organizers' Social Media Strategy
Effina Nurdini Febrita Mona, Aninidy Widita and Natasha Bellinda, Public Relations Department, Faculty of Digital Communication and Hotel & Tourism Bina Nusantara University, Jakarta, Indonesia
Yanuarita Kusuma Permata Sari, Communication Science Department, Faculty of Digital Communication and Hotel & Tourism, Bina Nusantara University, Jakarta, Indonesia

ID 454  The Role of Digital Transformation in Improving Service Quality and Brand Awareness Through the Utilization Social Media During Pandemic at the Indonesia University Hospital
Sandi Bakti, Zulkarnain, Department of Industrial Engineering, Universitas Indonesia

ID 240  Human cognitive behavior and its effects in production and quality control activities
Hanan Majri, Department of Industrial Engineering and Management Systems, NUMERIX Laboratory, University of Quebec, École de Technologie Supérieure, Notre Dame Street West, Montreal, Quebec, Canada
Jean-Pierre Kenne, Mechanical Engineering Department, NUMERIX Laboratory, University of Quebec, École de Technologie Supérieure, Notre Dame Street West, Montreal, Quebec, Canada

ID 355  Vision-Based Printed Circuit Board Inspection
M. B. Kiran, Associate Professor, Department of Mechanical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, INDIA

ID 566  The Impact of Indonesia's Government Tin Policies Sn 99.9% Towards the Global Market
Adinda Dewi Saputri Inten Nuryati and Roseno Aji Affandi, International Relations, Bina Nusantara University, Jakarta, Indonesia

8:00 – 9:45 am, MONDAY  Case Studies  Virtual Room 5
Session Chair: Eric Biancaflor, School of Information Technology, Mapúa University, Philippines
Zoom Host: Ms. Shipa, UTHM, Malaysia

ID 111  Towards the Development of a Web-Based Application for Chronic Pain Management Using Persuasive Technology
Mary Jane C. Samonte, School of Information Technology, Mapúa University, Manila, Philippines
Alexandra Mikaela G. Celestial, Emmanuel Carlos T. Medina and Karl Samuel D. San Juan, School of Information Technology, Mapúa University, Manila, Philippines

ID 132  Analyzing Digital Game Distribution in Gaming Industry: A case study
Jan Martin Gomez San Miguel and Dr. Eric Biancaflor, School of Information Technology, Mapúa University, Philippines

ID 195  Project Performance Analysis of Document Digitalization Projects (A Case Study)
Kirana Rukmayuninda Ririh, Eko Rachmat Julianto and Desinta Rahayu Ningtyas, Department of Industrial Engineering, Pancasila University Jakarta Selatan, Indonesia
Aulia Fashanah Hadining, Industrial Engineering Department, Engineering Faculty, Universitas Singaperbangsa Karawang, West Java, Indonesia

ID 239  Classification of Printing Ink Quality based on Pigment Dispersion Process: A Case Study
Muhammad Sopyan Yahya and Istri Surjandari, Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Depok, Indonesia

ID 269  Business Continuity and Disaster Recovery Plan for Banking Industry in Indonesia
ID 300  Teacher’s Well-Being and Teachers’ Sense of Efficacy among College Teachers in Ningxia: Application of Positive Psychology
Zhang Guoying, Student, Faculty of Human Development, Sultan Idris Education University (UPSI), Tanjong Malim, Perak, Malaysia
Azlina Abu Bakar, Professor, Faculty of Human Development, Sultan Idris Education University (UPSI), Tanjong Malim, Perak, Malaysia

ID 309  The Roles of Agricultural Industries in Japan: An Economic Analysis
Ubaiddilla Zuhdi, Rizqi Putri Nourma Budianti and Agung Firmansyah, Faculty of Business Economics and Digital Technology, Universitas Nahdlatul Ulama Surabaya, Surabaya, East Java, Indonesia
Yohan Kurniawan, Faculty of Language Studies and Human Development, Universiti Malaysia Kelantan, Bachok, Kelantan, Malaysia

8:00 – 9:45 am, MONDAY  Operations Research  Virtual Room 6
Session Chair: Joseph Kerlin, Mississippi State University, United States
Zoom Host: Ms. Rubana, Central Women’s University, Dhaka, Bangladesh

ID 16  Two Formulations for Minimizing Weight-Distance Objective In Single Vehicle Routing Problem With Quadratic, Cubic Objective Function And Its Linearization
RRK Sharma, Dept of IME IIT Kanpur, India
Vinay Singh, IIITM Gwalior, India
KK Lai, President, CYUT, Taiwan

ID 327  An optimization model for the maintenance programming of urban green area
Leonardo Gabriel Hernández Landa, Arlette Aguilar Villareal and Argelia Vargas Moreno, Professor, Department of Industrial engineer and management, Universidad Autónoma de Nuevo León, San Nicolás de los Garza, Nuevo León, México

ID 261  Procurement Costs Optimization in The Construction Industry with CRITIC-EDAS Approach and Transshipment Model
Naufal D. Aditia and Dendi P. Ishak, Industrial Engineering Department, Universitas Indonesia, Jakarta, Indonesia

ID 414  A Great Deluge Algorithm for University Examination Timetabling Problem
Lnasya Syafitrie, Komarudin, Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Depok, Indonesia

ID 423  Multi-Period Vehicle Routing Problem with Cross-Docking using Split Pickups and Deliveries
Muhammad Mustafa Ismail Turner and Komarudin, Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Depok, Indonesia

ID 34  Optimizing Realistic Responses from Civilians in Active Shooter Incidents
Joseph Kerlin, Mississippi State University, United States

ID 458  Improving Webservice REST API Performances Using Design Patterns: A case in Healthcare Business Intelligence Systems
Devita Dwitama Putri Baron, Faiza Renaldi and Irma Santikarama, Department of Informatics, Universitas Jenderal Achmad Yani, Cimahi, Jawa Barat, Indonesia

June 13 (Monday) - Session: 10:00 am – 1:00 pm  
Keynote Speakers – Ballroom / Virtual Room 1  
Zoom Host: Sai Abhijith Medavarapu, Master of Science in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA

10:00 – 10:20 am – Conference Chair Remarks

Keynote V: Monday, June 13, 2022, 10:20 – 11:00 am

Dr. Regiane Relva Romano
Professor and Head of Smart Cities at Facens
Advisor to Brazil’s Ministry of Science, Technology, Innovation and Communication, Brazil

Keynote VI: Monday, June 13, 2022, 11:00 – 11:40 am

H.D. Polumbo Jr.
Maj Gen USAF (retired)
Founding Partner and Senior Consultant
Two Blue Aces LLC
Winter Haven, Florida, USA

Keynote VII: Monday, June 13, 2022, 11:40 – 12:20 pm
Dr. Duane Davis  
Chief Physician Executive AdventHealth Institutes  
Orlando, Florida, USA  

Keynote VIII: Monday, June 13, 2022, 12:20 – 1:00 pm  

Ms. Donna Slyster  
Senior Vice President and CIO  
Saddle Creek Logistics Services  
Florida, United States  

1:00 – 2:00 pm – Lunch Break (Provided)  

June 13 (Monday) - Session: 2:00 – 3:45 pm  

WIIA Panel  

Panel Chair:  
Akashita Sareen  
Engineer in the Operations Planning and Engineering department  
FedEx Express  
United States  

Panel Speakers  
Sheena Butts  
Associate Vice President  
Surgical and Procedural Services  
Lakeland Regional Health  

Susan LeFrancois, Ph.D  
Data Science  
Florida Polytechnic University  

Amy Augustyniak  
Senior Manager, Supply Chain Analytics  
SaddleCreek Logistics  

Sanna Siddiqui, Ph.D.  
Mechanical Engineering  
Florida Polytechnic University  

2:00 – 3:45, MONDAY  

2:00 – 3:45, MONDAY  

Session Chair: Dr. Hayder Zghair, Southern Arkansas State University  
Zoom Host:  

1:40 pm – 2:00 pm  

Dr. Ahmed Mohamed  
Director of Solutions Engineering  
Orlando Health, FL, USA  

2:00 pm – 2:30 pm  

Foad H Khanli  
Director of Quality Assurance, Performance and Business Improvement  
Amor Health Services, Inc.  
Brownsville, Texas, USA  

Risk Assessment Made Easy in Health Care Industry by Applying Lean Six Sigma Methodology – DMAIC  

2:30 pm – 3:00 pm
2:00 – 3:45, MONDAY  OR  Onsite Room 3
Session Chair: Dr. Hayder Zghair, Southern Arkansas State University
Zoom Host: 

ID 60  Improving the Aggregate Production Planning by Considering the Congestion in Open Queuing Network
Dang Phi Van Hai, PhD Candidate, Department of Industrial Engineering, Dalhousie University, Halifax, Nova Scotia, Canada
Uday Ventakadri and Claver Diallo, Professor, Department of Industrial Engineering, Dalhousie University, Halifax, Nova Scotia, Canada
Tri Nguyen-Quang, Associate Professor, Department of Engineering, Faculty of Agriculture, Dalhousie University, Truro, Nova Scotia, Canada
Young Ki Chang, Assistant Professor, Department of Engineering, Faculty of Agriculture, Dalhousie University, Truro, Nova Scotia, Canada

ID 96  Hybrid Petri Nets and Tabu Search for Scheduling Optimization of Oil Refinery with Unreliable CDUs
Abdulrahman Al-Ahmari and Husam Kaid and Abdul-Aziz El-Tamimi, Industrial Engineering Department, College of Engineering, King Saud University, Riyadh, Saudi Arabia
Zhiwu Li and NaiQi Wu and Yan Qiao, Intelligent Science and Systems, Macau University of Science and Technology, Macao, China

ID 274  Coloring Intersection Points of Line Segments
Boris Brimkov, Assistant Professor, Department of Mathematics and Statistics, Slippery Rock University, Slippery Rock, Pennsylvania, USA

ID 311  The Value-Focused Management Applied to Healthcare Organizations
Magda Morgado Soares and Bernardo Borges Pedrós, Masters Degree Students, Department of Industrial and Entrepreneurial Engineering, Western Michigan University, Kalamazoo, USA

ID 396  Electricity Planning Models, Characteristics and Applications
Moses Jeremiah Barasa Kabeyi and Oludolapo Akanni Olanrewaju, Department of Industrial Engineering, Faculty of Engineering and the Built Environment, Durban University of Technology, Durban, South Africa

2:00 – 3:45, MONDAY  Data Analytics  Virtual Room 4
Session Chair: Md. Hasan SHAHRIAR, Department of Computer Science, Virginia Polytechnic Institute and State University, Arlington, Virginia, USA. Zoom Host: Martina Marruganti, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

ID 316  Exploring Concept Drift in Technology by Twitter Streams Mining
Alptekin Durmusoglu, Associate Professor, Department of Industrial Engineering, Gaziantep University, Gaziantep, Turkey
Mohammad Naci, Department of Industrial Engineering, Gaziantep University, Gaziantep, Turkey

ID 328  Predicting Bank Loan Eligibility Using Machine Learning Models and Comparison Analysis
Miraz Al Mamun, Department of Economics & Decision Sciences, University of South Dakota, Vermillion, South Dakota, USA
Afi Farjana and Muntasir Mamun, Department of Computer Science, University of South Dakota, Vermillion, South Dakota, USA

ID 411  Big Data Analytics and Performance Measurement in Public Sector Organization
Saad Aladyan, Dr. Shafiq Ahmed and Dr. Lotfi Hidri, Industrial Engineering Department, College of Engineering, King Saud University, Riyadh, Saudi Arabia

ID 17  Evaluation of the Particle Boards for the Construction Projects: A Hybrid MCDM Approach
Md. Tanvir Siraj and A. B. M. Mainul Bari, Department of Industrial and Production Engineering, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh
Muhammad Rubayat Bin Shahadat, Department of Mechanical Engineering, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh
Noor A Masqur Islam, Department of Accounting Information System, Jahangirnagar University, Dhaka, Bangladesh

ID 28  A Fuzzy Interactive Approach for Socially Responsible Portfolios Selection
Yahya Hanine, Youssef Lamrani Alaoui and Mohamed Tkouat, Islamic Finance Engineering Laboratory, Laboratory of Applied Mathematical Studies and Research (LERMA), Mohammadia School of Engineering (EMI), Mohammed V University, Rabat, Morocco
Younes Lahrichi, Laboratory of Research in Finance (LAREF), ISCAE Business School, Casablanca, Morocco

ID 57  Prioritization of the Electrical Risk Factors in the Ready-Made Garment Industries of Bangladesh: A Hybrid MCDM Approach
Md. Tanvir Siraj and A. B. M. Mainul Bari, Department of Industrial and Production Engineering, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh.
2:00 – 3:45, MONDAY  Operations Management  Virtual Room 5

Session Chair: Ateequr Rahman, School of Management & Entrepreneurship, Indian Institute of Technology, Jodhpur, India
Zoom Host: Ms. Shipa, UTHM, Malaysia

ID 79  Port Tampa Bay's Navigation of the COVID-19 Pandemic Using Situational Leadership
Deirdre Dixon, University of Tampa, United States

Lukman Salihu, James Agajo, Bala Salihu and Supreme A. Okoh, Department of Telecommunication Engineering, School of Electrical Engineering and Technology, Federal University of Technology, Minna, Niger State, Nigeria

ID 343  Inspection of Additive Manufactured Spur Gears Using Machine Learning
M. B. Kiran, Associate Professor, Department of Mechanical Engineering, School of Technology, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India

ID 389  Identification and Elimination of various problems associated with Low Performance and Low efficiency of Water-Cooled Chiller by Root Cause Analysis
Mirang Manish Dabhi and M. B. Kiran, Mechanical Engineering Department, School of Technology, Pandit Deendayal Energy University, Gandhinagar, Gujarat, India

ID 407  Business Groups Affiliation and Long-Term Borrowing from Internal Networks: An Empirical Study
Ateequr Rahman, Ph.D. Research Scholar, School of Management & Entrepreneurship, Indian Institute of Technology, Jodhpur, India
Sonam Chawla, Assistant Professor, Department of Human Resource, Jindal Global Business School, O. P. Jindal Global University, India
K. K. Lai, Professor & Vice President, Department of Business Administration, Chaoyang University of Technology Taichung, Taiwan

2:00 – 3:45, MONDAY  DSS  Virtual Room 6

Session Chair: Sadique S., Southern New Hampshire University (SNHU), Manchester, NH, USA
Zoom Host: Ms. Rubana, Central Women’s University, Dhaka, Bangladesh

ID 646  Techno-Economic Assessment for Geothermal Energy in Zimbabwe
N. Chikwama, Department of Chemical and Process Systems Engineering, School of Engineering and Technology, Harare Institute of Technology, Zimbabwe
M. M. Manyuchi and N. Sukdeo, Department of Operations and Quality Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

ID 654  Parallel, Distributed and Federated Learning for applying PRIM in Big Data
Rym Nassih, Phd Student in Machine Learning, Research team AMIPS, Ecole Mohammadia d’Ingénieurs, Mohamed V University in Rabat, Morocco
Abdelaziz Berrado, Professor of Industrial Engineering, Research team AMIPS, Ecole Mohammadia d’Ingénieurs, Mohamed V University in Rabat, Morocco

ID 655  The Value-Focused Management Applied to Healthcare Organizations
Magda Morgado Soares and Bernardo Borges Pedroso, Master’s Degree Students, Department of Industrial and Entrepreneurial Engineering, Western Michigan University, Kalamazoo, MI, USA

Sadique S., School of Engineering, Technology and Aeronautics (SETA), Southern New Hampshire University (SNHU), Manchester, NH, USA

June 13 (Monday) - Session: 4:00 – 5:45 pm

4:00 – 5:45, MONDAY  Onsite Room 1

Zoom Host: Sai Abhijith Medavarapu, Master of Science in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA

Industry 4.0 Panel

Panel Chair
Lina Khan
Systems Engineer
Strategic Missile Defense
Lockheed Martin Space
Titusville, Florida, United States
Panel Speaker I
Cintia Zuccon Buffon
Industrial Engineer
Ocean Insight
Orlando, FL, USA

Panel Speaker II
Thomas Jones
Ph.D. candidate at UCF
Department of Industrial and Systems Engineering
University of Central Florida
Orlando, FL, USA

Panel Speaker III
Dr. Saso Krstovski, MBB
Lean Manufacturing Coach /Six Sigma Master Black Belt
Van Dyke Transmission Plant
Ford Motor Company
Michigan, USA

Panel Speaker IV
Austin Taft
Mechanical Ground Support Engineer
Strategic Missile Defense
Lockheed Martin Space
Cape Canaveral, Florida, USA

4:00 – 5:45, MONDAY
Industry Solutions III
Onsite Room 2

Session Chair: Aaron Rubel, Airbus Americas, Inc., Mobile, Alabama, USA
Zoom Host:

4:00 pm – 4:20 pm
Mike Turner
Global Manager for Design for Six Sigma (DFSS) in Operational Excellence (OpEx)
General Motors Company
Warren, Michigan, USA
Title of Presentation: Start-Up of a Six Sigma Program: People, Process and Predicaments

4:20 pm – 4:40 pm
Akashita Sareen
Engineer in the Operations Planning and Engineering department
FedEx Express
United States

4:40 pm – 5:00 pm
Thomas Jones
Ph.D. candidate at UCF
Department of Industrial and Systems Engineering
University of Central Florida
Orlando, FL, USA

5:00 pm – 5:20 pm
Aaron Rubel, M.S.E.M.
Head of Aircraft Maintenance Programs Development
Intellectual Property Focal Point
Airbus Americas, Inc.
Mobile, Alabama Engineering Center
Mobile, AL 36615, USA

June 14 (Tuesday)

June 14 (Tuesday) - Session: 6:00 – 7:45 am
<table>
<thead>
<tr>
<th>ID 326</th>
<th>MSMEs' Choice of Places to Sell in the Pandemic Era</th>
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<tbody>
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<td>Puji Prabowo, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia</td>
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<th>Factors Affecting the Usage of Online Booking Sites: Comparative Analysis on Agoda, Booking, and Hotels</th>
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<td>Klarence Emmanuel F. Decena and Madylaine G. Delfin, School of Industrial Engineering and Engineering Management, Mapúa University, Intramuros, Manila, Philippines</td>
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**ID 123**  
**Transparency of Covid 19 Vaccine Distribution Using Block Chain Technology**  
Inayatullah, Prasetya Cahya S and Siti Elda Hiererra, Information Systems Department, School of Information system, Bina Nusantara University, Jakarta, Indonesia  
Enggai Siwiardiningih, Management Department, Binus Business School, Bina Nusantara University, Jakarta, Indonesia  
Renia Nuraeni, Communication Studies Program, Faculty of Communication and Business, Telkom University, Jakarta, Indonesia  
Destiana Kumala, Sekolah Tinggi Ekonomi Bisnis Islam Syariah Bina Mandiri, Bogor, Indonesia

**ID 124**  
**Government Assistance Monitoring Model for Social Assistance for Covid 19 Victims Based on Blockchain Technology**  
Inayatullah, Information Systems Department, School of Information system, Bina Nusantara University, Jakarta, Indonesia

**ID 125**  
**Integrated Model Knowledge Management System and E-Government to Improve Community Service**  
Inayatullah, Prasetya Cahya S and Siti Elda Hiererra, Information Systems Department, School of Information system, Bina Nusantara University, Jakarta, Indonesia  
Nico Djundharto Djajasinga, Politeknik Transportasi Darat Indonesia-STTD, Indonesia  
Muhammad Rahan Adril Kamal Fachrul, Faculty of Law Universitas Brawijaya  
Rivaldhy N. Muhammad, Study Program of Law, Faculty of Law, Social and Political Sciences, Open University, Indonesia  
Sawqi Saad El Hasan, Sekolah Tinggi Ekonomi Bisnis Islam Syariah Bina Mandiri, Bogor, Indonesia  
Sugeng Riyanto, STIE Pertwi, Bekasi, Indonesia

**6:00 – 7:45 am, TUESDAY**  
**Smart Systems**  
Virtual Room 3

Session Chair: Tayeb Brahimi, Effat University, Jeddah, Saudi Arabia  
Zoom Host: Karthik Dhandapani, MSIE Program, Lawrence Tech, MI, USA

**ID 549**  
**The Influence of Online Platform on Satisfaction: Mediating Role of Online Shopping Experience**  
Sylvia Samuel, Department of Economics and Business, Universitas Pelita Harapan, Karawaci, Indonesia  
Lianna Wijaya, Management Department, Faculty of Binus Online Learning, Bina Nusantara University, Jakarta, Indonesia  
Tiurida Lily Anita, Hotel Management Department, Faculty of Economic and Communication, Bina Nusantara University, Jakarta, Indonesia

**ID 550**  
**Factors Analysis for Customer Behavior on The E-Commerce Platform in Thailand**  
Charukrit Chaiwan and Sunida Tiwong, Business Excellence and Logistics Research Centre: BE-Logist, School of Management, Mae Fah Luang University, Chiang Rai, Thailand  
Janista Theja Schenker and Thanyalak Ramkrathok, Logistics and Supply Chain Management, School of Management, Mae Fah Luang University, Chiang Rai, Thailand

**ID 541**  
**China’s Turn to Twiplomacy: Efforts to Counter Negative Narratives Online**  
Irene Rahafi and Ella Syafputri Prihatini, Ph.D., International Relations Department, Bina Nusantara University, Jakarta, Indonesia

**ID 542**  
**Mapping and Visualizing Research Trend of Smart Farm with Internet of Things in the Last Ten Years using Bibliometric Analysis**  
Fairuz Iqbal Maulana, Computer Science Department, School of Computer Science, Bina Nusantara University, Jakarta, Indonesia  
Agung Purwono and Febby Candra Pratama, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia  
Faizal Ardiansyah, Informatics Engineering Study Program, Faculty of Computer Science, Universitas Brawijaya, Malang, Indonesia

**ID 540**  
**Analysis of News Coverage on COVID-19 in Indonesia by Australian Media**  
Marlina Sugartio and Ella Syafputri Prihatini, Ph.D., International Relations Department, Bina Nusantara University, Jakarta, Indonesia

**ID 556**  
**Mapping and Visualization Research Trend of Supply Chain Digital Twin: A Bibliometric Review**  
Fairuz Iqbal Maulana, Computer Science Department, School of Computer Science, Bina Nusantara University, Jakarta, Indonesia  
Raden Aditya Kristanto Putra, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia  
Donna Carolinna, Visual Communication Design Department, School of Design, Bina Nusantara University, Jakarta, Indonesia  
Mohammad Nazir Arifin, Informatics Engineering Study Program, University of Madura, Pamekasan, Indonesia  
Ridho Herasmara, Electrical Engineering, Faculty of Science and Technology, Raden Rahmat Islamic University, Malang, Indonesia

**6:00 – 7:45 am, TUESDAY**  
**IoT**  
Virtual Room 4

Session Chair: Francis Rousseau, IoT & Industry 4.0 department, Uznikod, Montréal, Canada  
Zoom Host: Curzio Pagliari, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

**ID 131**  
**e-Bukid: a IoT Telemetry System With Automated Animal Feeder**  
John Daryl Aumentado, James Nathanael C. De Los Reyes, Mark Louie DJ. Dipad, Joshua Angelo Karl R. Perez, Wesley Mikhail C. Tolentino and Dr. Eric B. Blancoflor, School of Information Technology, Mapua University, Philippines

**ID 235**  
**Mapping and Visualization Research Trend of Supply Chain Digital Twin: A Bibliometric Review**  
Fairuz Iqbal Maulana, Computer Science Department, School of Computer Science, Bina Nusantara University, Jakarta, Indonesia  
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Donna Carolinna, Visual Communication Design Department, School of Design, Bina Nusantara University, Jakarta, Indonesia  
Mohammad Nazir Arifin, Informatics Engineering Study Program, University of Madura, Pamekasan, Indonesia  
Ridho Herasmara, Electrical Engineering, Faculty of Science and Technology, Raden Rahmat Islamic University, Malang, Indonesia

**ID 265**  
**IoT Messaging using Low-Cost COTS Devices**  
Francis Rousseau, IoT & Industry 4.0 department, Uznikod, Montréal, Canada  
Tony Wong, Systems Engineering Department, École de technologie supérieure, Montréal, Canada
Proceedings of the 7th North American Conference on IEOM 2022

PARALLEL SESSIONS

June 11-14, 2022

ID 393 Bitcoin's Influence on China's Political Policy from a Realist Perspective
Muhammad Rifqi Fadhil and Roseno Aji Affandi, International Relations Department, Faculty of Humanities, Bina Nusantara University, Jakarta, Indonesia

ID 462 The Practicality of the Internet of Underwater Things: MATLAB & Simulink AUV Application
rabab Al Talib, Asmaa Alqurashi and Hala Fatayerji, Student, Department of Electrical and Computer Engineering, Effat University College of Engineering, Jeddah, Saudi Arabia

ID 476 The Effect of Transparency, Accountability, and Participation of Wise Netizens in Social Media (Facebook)
Rakha Abiyuu, Jennie Hesti Wijaya, Surya Nanda Marion and Suthya Atas Sari, Management Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 477 The Effect of Transparency, Accountability, and Participation of Wise Netizens in Social Media (Facebook)
Rakha Abiyuu, Jennie Hesti Wijaya, Surya Nanda Marion and Suthya Atas Sari, Management Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

6:00 – 7:45 am, TUESDAY
Case Studies

Session Chair: Mohd Hamidi Solahudin, Ministry of Education, Federal Government Administrative Centre, Putrajaya, Malaysia
Zoom Host: Ms. Shipa, UTHM, Malaysia

ID 384 Improvement of Teaching Effectiveness for Autism Children
Norsuhaily Abu Bakar, Faculty of Applied Social Sciences, Universiti Sultan Zainal Abidin, Terengganu, Malaysia
Zuairina Ali, Centre for Modern Languages, Universiti Malaysia Pahang, Pahang, Malaysia
Jumadi Saputra, Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu, Malaysia
Zailani Jusoh, Faculty of Language and Communication, Universiti Sultan Zainal Abidin, Terengganu, Malaysia
Mohd Hamidi Solahudin, Ministry of Education, Federal Government Administrative Centre, Putrajaya, Malaysia
Yohan Kurniawan, Faculty of Language Studies and Human Development, Universiti Malaysia Kelantan, Bachok, Kelantan, Malaysia

ID 413 The Roles of Steel Industries in the National Economy: The Case of Japan
Ubaidillah Zuhdi, Rizqi Putri Nourma Budiarti and Agung Firmansyah, Faculty of Business Economics and Digital Technology, Universitas Nahdlatul Ulama Surabaya, Surabaya, East Java, Indonesia
Mohd Hamidi Solahudin, Ministry of Education, Federal Government Administrative Centre, Putrajaya, Malaysia

ID 381 K-pop Idol Promoting Feminism in South Korea: A Case from Red Velvet
Samantha Septiani and Ella Prihatini, International Relations Department, Bina Nusantara University, Jakarta, Indonesia

ID 664 Blockchain Technology Evaluation with Linguistic Variables: A Case for Smart Agriculture
Gülçin Büyüközkan, Professor, Department of Industrial Engineering, Galatasaray University, Ortaköy, Istanbul, Turkey
Deniz Uztürk, Department of Management, Business Research Center, Galatasaray University, Ortaköy, Istanbul, Turkey

ID 676 The Role of Leadership Styles on Organizational Performance Through the Mediation Effect of Artificial Intelligence: A Conceptual Framework
Mansour Sulaiman Alshamisi and Aryani Binti Ahmad Latiffi, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia

ID 677 The Influence of Knowledge Management, Geospatial Thinking and Information Technology on Disaster Management in the UAE
Saif Ali Albooshi and Mohd Yamani Bin Yahya, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia

6:00 – 7:45 am, TUESDAY
Engineering Management

Session Chair: Mahmudul Hasan Porag, Dept of Manufacturing &Industrial Engineering, University of Texas Rio Grande Valley, Edinburg, Texas
Zoom Host: Ms. Rubana, Central Women’s University, Dhaka, Bangladesh

ID 1 A MILP Model for Optimal Sizing of A Concentrating Solar Power Plant with Thermal Energy Storage
Ahmed M. Ghaithan, Assistant Professor, Construction Engineering & Management, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

ID 64 Improving the Supply Chain Efficiency Using DMAIC Process
Awsan Mohammed, Construction Engineering and Management Department, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

ID 72 Performance Evaluation of Supply Chain Management Based on SCOR Model: A Case Study of Halal Chicken Processing Industry in Upper Northern Region, Thailand
Adcharawadee Keawwande and Chakthong Thongchattu, Department of Industrial Engineering, School of Engineering, University of Phayao, Phayao, Thailand

ID 223 Determining Factors of Financial System Stability (FSS) in Indonesia
Budi Santosa, Faculty of Economics and Business, Universitas Trisakti
Kurniat Karim, Sekolah Tinggi Ilmu Ekonomi (STIE) Sakti Alam Kerinci, Jambi, Indonesia
Misdawita, Faculty of Economics and Business, Universitas Riau, Pekanbaru, Indonesia
Nany Librianty, Universitas Pahlawan, Batam, Indonesia
Dedi Iskamto, Sekolah Tinggi Ilmu Ekonomi Riau, Indonesia
### ID 287  Redesign Improved Customer Complaint Handling Time at Shipping Companies
Lutfiani, College Student, Department of Industrial Engineering, University of Indonesia, UI Depok Campus, Indonesia
Prof. Dr. Ir. Djoko Sihono Gabriel, MT, Lecturer, Department of Industrial Engineering, University of Indonesia, UI Depok Campus, Indonesia
Dr. Novandra Rhezza Pratama, ST, MT, Lecturer, Department of Industrial Engineering, University of Indonesia, UI Depok Campus, Indonesia

### ID 303  Qualitative Analysis About the Use of Frameworks and Best Practices for Project Management, A Systematic Literature Review
Alberto de Jesús Rodríguez Cuellar, Student of master’s degree / Mechanical Engineer, Posgrados CIATEQ A.C. / Metal Fab Flex LTD Aguascalientes, Aguascalientes, México
José Carlos Hernández-González, Research Associate in Logistics and Supply Chain / Specialized Engineer IT, electronics, and control., CIATEQ A.C., Villahermosa, Tabasco, México

### ID 388  Gamma Distributed Three-stage Pricing model considering Uncertainty in Buyer's Readiness
Mahmudul Hasan Porag, Department of Manufacturing & Industrial Engineering, University of Texas Rio Grande Valley, Edinburg, Texas, USA

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### June 14 (Tuesday) - Session: 8:00 – 9:45 am

#### Plenary III
**Onsite Room 1**

- **8:00 – 8:30 am (Tuesday, June 14)**
  - Sagit Kedem-Yemini
  - Logistics Department
  - Sapir Academic College
  - Sderot, Israel
  - Dr. Tali Freed
  - Director, PolyGAIT-RFID Research and Development Center
  - Professor, Industrial and Manufacturing Engineering Department
  - California Polytechnic State University
  - San Luis Obispo, California, USA

- **8:30 – 9:00 am (Tuesday, June 14)**
  - Sandro Paz, Ph.D.
  - Director of the Industrial Engineering Program – PUCP
  - Former Director of University Accreditation
  - Pontificia Universidad Catolica del Peru
  - San Miguel, Peru

- **9:00 – 9:30 am (Tuesday, June 14)**
  - Dave Harry
  - Black Belt Trainer / Kata Coach
  - President & CEO
  - Process Whisperer® Consultants LLC
  - Greeneville, TN, USA

#### GSCM
**Onsite Room 2**

- **8:00 – 9:45 am, TUESDAY**
  - Session Chair: Dr. Ahad Ali
  - Zoom Host:

#### Modeling and Simulation
**Onsite Room 3**

- **8:00 – 9:45 am, TUESDAY**
  - Session Chair: Çağlar S. Aksezer, Professor, Department of Industrial Engineering, Işık University, Istanbul, Turkey

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### ID 33  Mailroom Operation Improvement Using Simulation
Asnath Sethiel Mosha, Jack Krivitsky and M Ali Montazer, Department Mechanical and Industrial Engineering, University of New Haven, West Haven, CT, USA
ID 98  Learning Water Quality Functions from Data for Monitoring and Controlling Water Quality in Networks
Kia Zadeh, Industrial Engineering Ph.D. Student, School of Computing and Augmented Intelligence (SCAI), Arizona State University, Tempe, USA
Treavor Boyer, Professor, School of Sustainable Engineering and the Built Environment, Arizona State University, Tempe, AZ, USA
Pitu Mirchandani, Professor, School of Computing and Augmented Intelligence (SCAI), Arizona State University, Tempe, AZ, USA

ID 387  Toyota Kata, the “Secret Sauce” of the Toyota Production System
David A. Harry, Chief Executive Officer and Black Belt Trainer, Process Whisperer Consultants LLC, Former University of Tennessee, Knoxville Greeneville, Tennessee U.S.A.

ID 467  Modelling of a Hybrid Vehicle for Autonomous Vehicles Research
Ala J Alnaser, Onur Toker and Abigail Bowers, 1Department of Applied Mathematics, 2Department of Electrical and Computer Engineering Florida Polytechnic University, Lakeland, Florida, USA

ID 118  Medical Device Maintenance Strategy for Post Pandemic: Case on Ventilators
Çağlar S. Aksezer, Professor, Department of Industrial Engineering, İstik University, İstanbul, Turkey

ID 578  Development of Material Requirement Planning System for Snack Manufacturing Company
Sohbi Mejiaaoli, Ph.D., Assistant Dean for Graduate Studies, & Research, MEM Master Program Director Assistant Professor of Industrial Engineering, Alfaisal University, Riyadh, Saudi Arabia
Saad bin Saidan, Mohammed AlShuqayr and Al-Waleed Al-Babtain, Student, Department of Industrial Engineering, Alfaisal University, Riyadh, Saudi Arabia

ID 602  Identifying and Prioritizing the Factors Influencing the Customer Satisfaction / Customer Loyalty of Automobile After Sales Service Centres using Best Worst Method
Vigneshwaran. Sr and Mathirajan. M, Department of Management Studies, Indian Institute of Science, Bangalore, India

8:00 – 9:45 am, TUESDAY
Smart Mobility and Smart Cities
Virtual Room 4
Session Chair: Galal M. Abdella, Mechanical and Industrial Engineering Department, College of Engineering, Qatar University, Doha, Qatar
Zoom Host: Martina Marruganti, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy

ID 313  Urban logistics and smart solutions: a mixed transportation evaluation proposal
Dr Sara Amar, Assistant Professor, Liwa College of Technology, Abu Dhabi, UAE

ID 318  Intelligent mobility management System (IMMS): Scoping review
Sohib Chengaou, Khalid El Yassini and Achraf Haibi, IA Laboratory, Faculty of Sciences Meknes, Moulay Ismail University, Meknes, Morocco
Kenza Oufaska and Achraf Haibi, TICLab Laboratory, College of Engineering & Architecture, International University of Rabat, Rabat, Morocco

ID 412  Tourism Management in Smart City: A Systematic Review of Academic Research
Agung Purnomo, Entrepreneurship Department, BINAUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia
Hendro Nindito and Evaristus Didik Madyatmadja, Information Systems Department, School of Information Systems, Bina Nusantara University Jakarta, Indonesia
Albert Verasius Dian Sano, Computer Science Department, School of Computer Science, Bina Nusantara University, Jakarta, Indonesia
Corinthias P.M. Sianipar, Department of Global Ecology, Graduate School of Global Environmental Studies (GSGES), Division of Environmental Science and Technology, Graduate School of Agriculture (GSA), Kyoto University, Kyoto, Japan

ID 415  A Systematic Review of Smart Tourism for Sustainable Tourism
Agung Purnomo, Entrepreneurship Department, BINAUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia
Albert Verasius Dian Sano, Computer Science Department, School of Computer Science, Bina Nusantara University, Jakarta, Indonesia
Evaristus Didik Madyatmadja and Hendro Nindito, Information Systems Department, School of Information Systems, Bina Nusantara University Jakarta, Indonesia
Corinthias P.M. Sianipar, Department of Global Ecology, Graduate School of Global Environmental Studies (GSGES), Division of Environmental Science and Technology, Graduate School of Agriculture (GSA), Kyoto University, Kyoto, Japan

ID 497  Optimizing Electric Vehicle Charging Infrastructures: A Microscopic Review
Saeed Al-Muhannadi, Galal M. Abdella and Aedeeb A. Kutty, Mechanical and Industrial Engineering Department, College of Engineering, Qatar University, Doha, Qatar

ID 455  Life Cycle Cost for Micro, Small, and Medium-Sized Enterprises in the Indonesian Food Industry
Lia Nur Octavia and Isli Surjandari, Departement of Industrial Engineering, Universitas Indonesia, Depok, West Java, Indonesia

ID 449  The Role of Technology Readiness towards Technology Acceptance on Smartwatch Use
Romadoni Kevin Julian and Arian Dhini, Department of Industrial Engineering, Universitas Indonesia, Depok, Indonesia

8:00 – 9:45 am, TUESDAY
Case Studies
Virtual Room 5
Session Chair: Ms. Janice J. Gumasing, School of Industrial Engineering and Engineering Management, Mapua University, Manila, Philippines
Zoom Host: Ms. Shipa, UTHM, Malaysia

ID 379  Motivational Impacts of the Google Docs Integration to Support Collaborative Writing: A Review Approach
Sharifahtun Naim Shahidan and Zuraina Ali, Centre for Modern Languages, Universiti Malaysia Pahang, Pahang, Malaysia
Norsuhaily Abu Bakar, Faculty of Applied Social Sciences, Universiti Sultan Zainal Abidin, Terengganu, Malaysia
Jumadil Saputra, Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu, Malaysia
ID 381  The Interplay of Work Family Conflict and Enrichment in Determining Employee Wellbeing
R Zintawat Aida R Ibrahim, Suraya Sulong and Jumadil Saputra, Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu, Malaysia
SURAYA SULONG, DEPARTMENT OF TERENCEGANU STATE HEALTH, LEVEL 5, WISMA PERSEKUTUAN, TERENCEGANU, MALAYSIA

ID 382  Learning Domains: A Preliminary Study of the Teaching Perceptions of Pedagogy in English-Based Huffaz Preschools
Zuraina Ali and Faliza Ibrahim, Centre for Modern Languages, Universiti Malaysia Pahang, Pahang, Malaysia
Norsuhaily Abu Bakar, Faculty of Applied Social Sciences, Universiti Sultan Zainal Abidin, Terengganu, Malaysia
Jumadil Saputra, Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu, Malaysia

ID 446  Analysis of MetaMed Web Application to determine strategies
Jonathan Marcois Jose E. Carnaglican Jr., Jim Daniel A. Giron and Angelo R. Guevarra, School of Information Technology, Mapua University, Makati, Philippines

ID 472  The Effect of Time Budget Pressure, Task Complexity and Professional Commitments on Reducing Audit Quality (RAQ) in Public Accountant Offices
Mediana Mutia Alfì and Armanto Wijaksono, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia

ID 474  The Effect of Emotional Intelligence and Locus of Control on The Work Stress and Its Implication on The Satisfaction of Sales Staff of Financial Technology Business Unit of PT Bank XYZ
I Henri Setyantri, M J Elvansyah, Vincentia Janice and Engkos Achmad Kuncoro, Management Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 486  Analysis of The Effect of Corporate Social Responsibility, Gender Chief Financial Officer and Majority Ownership on Tax Aggressive Behavior (Empirical Study on Trade and Service Sector Companies Listed on Indonesia Stock Exchange 2013-2016)
Priscilia and LeVanha Dhiaw Prawati, Accounting Department, School of Accounting, Bina Nusantara University, Jakarta, Indonesia

ID 518  Effects of Perceived Risk of COVID-19 on the Academic Stress of Undergraduate Students
Ma. Janice J. Gunasing, Daniel Perez, Franco Sanchez, and Ervin Santos, School of Industrial Engineering and Engineering Management, Mapua University, Muralla St., Intramuros, Manila, Philippines

8:00 – 9:45 am, TUESDAY  Innovation and Industry 4.0  Virtual Room 6
Session Chair: Jorge Oliveira e Sá, Researcher, ALGORITMI Research Center, University of Minho, Guimarães, Portugal
Zoom Host: Ms. Rubana, Central Women’s University, Dhaka, Bangladesh

ID 408  Strengthening Participatory Supervision through Online Participatory Supervisory Schools at Simultaneous Elections in West Kalimantan in the Era of Global Pandemic
Elyta, Martoyo and Dedi Kusnadi, Universitas Tanjungpura, Pontianak, Indonesia
Muhammad Uhaib As’ad, Universitas Islam Kalimantan Muhamad Arsayad Albarhan, Banjar Masin, Indonesia
Taufik Arbian, Universitas Lambung Mangkurat, Banjar Masin, Indonesia
Syf. Aryana Kaswayana, Member of the Bawaslu of West Kalimantan Province, Indonesia

ID 409  Sustainability and Industrial Engineering Perspectives on Industry 4.0 and Electronic Device in Toll Gate
Kristian Edi Nugroho Soebandria and Ho Hwi Chie, Industrial Engineering Department, Faculty of Engineering, Bina Nusantara University, Jakarta, Indonesia

ID 410  Water Dispenser Manganese Greensand Filter on Product Design and Industrial Engineering Perspectives
Kristian Edi Nugroho Soebandria, Industrial Engineering Department, Faculty of Engineering, Bina Nusantara University, Jakarta, Indonesia,
Reiko Sarah Pradita, Product Design Engineering, Industrial Engineering Department, BINUS ASO School of Engineering, Bina Nusantara University, Jakarta, Indonesia

ID 20  Science Recommendations Based on Social Media Platform
Jorge Oliveira e Sá, Researcher, ALGORITMI Research Center, University of Minho, Guimarães, Portugal

ID 149  The Effect of Product Development, Health Consciousness on Purchase Intention and Decision
Clara Geovanca, Michael Gabriel, Sonia Ariwati and Lasmy, Management Program, Management Study Program, BINUS Business School Undergraduate Program, Bina Nusantara University, Tangerang, Indonesia

ID 157  Evaluating the Current Policies’ Impacts on the 5G adoption in Indonesia using a systemic framework
Hermawanto Tjoa and Ahmad Hidayatno, Industrial Engineering Department, Universitas Indonesia, Depok, Indonesia

Keynote Speakers – Ballroom / Virtual Room 1
Zoom Host: Sai Abhijith Medavarapu, Master of Science in Industrial Engineering Program, Lawrence Technological University, Southfield, MI, USA

10:00 – 10:20 am Conference Chair Remarks
Keynote IX: Tuesday, June 14, 2022, 10:20 – 11:00 am

Dr. Mary Vollaro
Professor and Chair
Department of Mechanical Engineering and Environmental Engineering
Florida Polytechnic University
Lakeland, FL USA

Keynote X: Tuesday, June 14, 2022, 11:00 – 11:40 am

Dr. Mansooreh Mollaghasemi
Associate Professor
Industrial Engineering & Management Systems Department
University of Central Florida
Orlando, Florida, USA

Keynote XI: Tuesday, June 14, 2022, 11:40 am – 12:20 pm

Dr. Ahmed Kamel
Senior Key Expert, Additive Manufacturing and Innovation
Siemens Energy
Orlando, Florida, United States

Keynote XII: Tuesday, June 14, 2022, 12:20 – 1:00 pm

Dr. Timothy Kotnour
Lockheed Martin St. Laurent Professor
Department of Industrial Engineering and Management Systems
University of Central Florida
Orlando, Florida, USA

1:00 – 2:00 pm – Lunch Break (Provided)

June 14 (Tuesday) - Session: 2:00 – 3:45 pm

2:00 – 3:45, TUESDAY    Global Supply Chain and Logistics II   Onsite Room 1

Panel Chair
Alper Senol
Professor- Supply Chain Management
Miami Dade College
Miami, FL, USA

Panel Speaker I
Dennis Tribby
Director of Portfolio Solutions
Siemens Digital Industries Software
Florida, USA

Panel Speaker II
Professor Don Reimer
Director of Membership and Chapter Development – IEOM Society
President, The Small Business Strategy Group, Detroit, Michigan, USA

GSCM Panel
IEOM Orlando Conference
PARALLEL SESSIONS
June 11-14, 2022

Adjunct Faculty – A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University, Southfield, Michigan, USA

Panel Speaker III

Mohammad Anwar Rahman, Ph.D.
Associate Professor
Manufacturing and Construction Management
Central Connecticut State University
New Britain, CT, USA

Panel Speaker IV

Mark Calabrese
Senior Instructor
Department of Industrial Engineering and Management Systems
University of Central Florida
Orlando, FL, USA

2:00 – 3:45, TUESDAY
Plenary IV
Onsite Room 2

Session Chair: Dr. Saso Krstovski, MBB
Zoom Host:

2:00 pm – 2:30 pm
Dr. Saso Krstovski, MBB
Lean Manufacturing Coach /Six Sigma Master Black Belt
Van Dyke Transmission Plant
Ford Motor Company
Michigan, USA

2:30 pm – 3:00 pm
Dr. Daw Alwerfalli
Professor of Mechanical and Manufacturing Engineering
Director of Master of Engineering Management Program
College of Engineering
Lawrence Technological University
Southfield, Michigan, USA

2:00 – 3:45, TUESDAY
Engineering Education and AI
Onsite Room 3

Session Chair: Aamar Shabir and Muhammad Ullah, Florida Polytechnic University, Lakeland, Florida, USA

ID 263 Disruptive strategies in the use of digital tools in public universities of the Amazon in the time of COVID - 19
Mario Chauca, Professor, Engineering Faculty, Ricardo Palma University, Santiago de Surco, Lima, Perú
Ibis López, Manuel Padilla, Wildoro Ramírez and Ingrid Herrera, Professor, Academic Department of Humanities and Social Sciences
National University of San Martin, Tarapoto, San Martin, Perú

ID 159 Emotional Intelligence and SMEs’ performance in the Accra Metropolis, Ghana
Regina Appiah Gyimah, Department of Marketing, Accra Technical University. Accra, Ghana

ID 100 Creating a Teaching Platform for Course Design under the SCRUM Framework
Jesús Alexis Torrecillas Salazar, Corazón Beas Zertuche, Angélica Chapa, Manuel Benjamín Hernández, Mayra Angélica Hinojosa, Universidad de Monterrey, Mexico

ID 356 Performance Analysis and Conversion of a Diesel Engine Power Plant to A Dual-Fuel Power Plant for Kipevu- III 120 MW Power Station
Moses Jeremiah Barasa Kabeya and Oludolapo Akanni Olanrewajub, Department of Industrial Engineering, Faculty of Engineering and the Built Environment, Durban university of Technology, Durban, SA

ID 402 Exploring, the impacts of Chirality Engineering of Carbon Nanotubes to improve the efficiency of Solar Cell
Aamar Shabir and Muhammad Ullah, Department of Electrical and Computer Engineering, Florida Polytechnic University, Lakeland, Florida, USA

ID 419 A Supervised Learning Approach to Assessing Accounts Receivable Risk in Small-to-Medium Enterprises
Jim Dewey, Calvin Ingram and Reinaldo Sanchez-Arias, Department of Data Science & Business Analytics, Florida Polytechnic University Lakeland, Florida, USA

2:00 – 3:45, TUESDAY
Operations Management
Virtual Room 4

Session Chair: Aspen Thomas, Department of Engineering and Physics, Southern Arkansas University, Arkansas, USA
Zoom Host: Martina Marruganti, Department of Industrial Engineering, Alma Mater Studiorum University of Bologna, Bologna, Italy
ID 599 Cost analysis, Breakeven analysis and cash-flow analysis for an ice-cream case study
Dalal Abahusain, Alanoud Alfawaz, Noura Alhinti and Dalal Alabdullatif, College of Engineering, Alfaisal University, Riyadh, Saudi Arabia

ID 612 Multi-agent approach promoting interoperability between Internet of Things applications
Patrick Pierre and Roger Nkambou et Pierre Poirier, Department of Computer Science, University of Quebec in Montreal (UQAM) Montreal, Canada

ID 613 Spatial Analysis of Traffic Accidents Between Tunisian Regions
Ouni Fedy, Department of Transportation and Logistics, Higher Institute of Transport and Logistics of Sousse, University of Sousse, Tunisia
Attig Ines, Department of Economics, Faculty of Economic Sciences and Management of Sousse, University of Sousse, Tunisia
Harizi Riadh, Department of Business Administration, University of Bisha, Bisha, Saudi Arabia, College of Business, Saudi Arabia

ID 614 Case Study: Improving Employee Engagement and Utilization of the Service Engineering Workforce
Aaron Rubel, MSEM, Head of Aircraft Maintenance Programs Development, Airbus Americas, Inc., Mobile, Alabama, USA
Dr. Aldo McLean, P.E., Department of Engineering Management & Technology, The University of Tennessee at Chattanooga Chattanooga, TN, USA

ID 616 Ethics of Implementing Machine Learning using Industry 4.0 Concepts in Aerospace and Defense Industries
Lina Khan, Doctoral Student, Department of Industrial Engineering and Management Systems, University of Central Florida Orlando, Florida, USA

ID 620 Inflow-Outflow Net Equivalents for Recovery Point Analysis of Improvement Model
Aspen Thomas and Hayder Zghair, Department of Engineering and Physics, Southern Arkansas University, Arkansas, USA

June 14 (Tuesday) - Session: 4:00 – 5:45 pm

Diversity and Inclusion Panel Sponsored by Ford Motor Company

Panel Chair
Wilkitstar Otieno, Ph.D.
Associate Professor and Chair
Industrial and Manufacturing Engineering
Preparing Engineers and Computer Scientist NSF-STEM Scholarship PI. & WiscAMP Faculty Mentor
University of Wisconsin-Milwaukee
Milwaukee, WI, USA

Panel Speaker I
Professor Don Reimer
Director of Membership and Chapter Development – IEOM Society
President, The Small Business Strategy Group, Detroit, Michigan, USA
Adjunct Faculty – A. Leon Linton Department of Mechanical Engineering
Lawrence Technological University, Southfield, Michigan, USA

Panel Speaker II
Ms. Lourdes Matos-Rivera
Principal Systems Engineer
Northrop Grumman Aeronautics Systems
Orlando, Florida

Panel Speaker III
Yazeli Cruz
Medallia Expert Services / Latinx@Medallia Lead
Medallia
Washington, DC, USA

Panel Speaker IV
Charles W. Davis, Jr., Ph.D.
Associate Professor
Valencia College
Orlando, FL 32811

4:00 – 5:45, TUESDAY
GSCM III
Onsite Room 2

Session Chair: Alper Senol
**IEOM Orlando Conference**  
**PARALLEL SESSIONS**  
**June 11-14, 2022**

**June 14 (Tuesday) - Session: 7:00 – 10:00 pm**

**Conference Awards Dinner**
Holiday Inn across the Universal Orlando

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9th IEOM Annual International Conference, Bangkok, Thailand, March 5-7, 2019

Second IEOM Fellows Induction at the IEOM Bangkok Conference on March 6, 2019
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<tr>
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<td>President, Small Business Strategy Group, Detroit, Michigan, USA</td>
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Pro-Vice Chancellor Strategic Partnerships and Industrialisation
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Mt Pleasant, Harare, Zimbabwe

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Professor of Technology Management, Department of Production and Operations Management, Universiti Tun Hussein Onn Malaysia

Prof. Vitor Mendes Caldana
Federal Institute of Sao Paulo (IFSP)
– Sorocaba Campus
Sorocaba, Sao Paulo, Brazil

Dr. Eldon Caldwell
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Engineering School
University of Costa Rica
San Jose, Costa Rica

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Head of the Centre for Supply Chain Improvement
College of Business, Law and Social Sciences, Derby Management School
University of Derby, UK

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Professor Systems Engineering Department
King Fahd University of Petroleum and Minerals
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Graduate Program Coordinator Professor, Department of Industrial and Systems Engineering
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University of New Brunswick
Fredericton, NB, Canada

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Professor, Industrial and Systems Engineering
Texas A&M University (College Station)
USA

Professor Bernardo Villarreal, Ph.D.
Professor, Department of Engineering
Universidad de Monterrey
San Pedro Garza Garcia, NL Mexico
Upcoming Events

3rd South American Conference on Industrial Engineering & Operations Management
Asuncion, Paraguay, July 19-21, 2022
Host: Asuncion National University

5th European Conference on Industrial Engineering & Operations Management
Rome, Italy, July 26-28, 2022
Host: Sapienza – University of Rome

2nd Indian Conference on Industrial Engineering and Operations Management
August 16-18, 2022, Warangal, India
Hosts: NIT, Warangal and JNTU, Hyderabad

3rd Asia Pacific Conference on Industrial Engineering and Operations Management
Sept. 13-15, 2022, Johor Bahru, Malaysia
Hosts: Universiti Teknologi Malaysia (UTM) & Universitas Sebelas Maret (UNS), Indonesia

First Australian Conference on Industrial Engineering and Operations Management
Sydney, Australia, December 20-22, 2022
Venue: Hilton Sydney, NSW, Australia

5th International Conference on Industrial and Mechanical Engineering and Operations Management™ (IMEOM)
Dhaka, Bangladesh, December 26-27, 2022
Venue: Krishibid Institution Bangladesh Complex, Farmgate, Dhaka

13th Annual International Conference on Industrial Engineering and Operations Management
March 7-9, 2023, Manila, Philippines
Venue: Hilton Manila, Host: De La Salle University