



# IEOM Society

*"Achieving and Sustaining Operational Excellence"*

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## **2026 IEOM North American Awards – Industrial Engineering and Operations Management International Conference** **Milwaukee, Wisconsin, USA, June 8-11, 2026** **Venue: University of Wisconsin-Milwaukee**

### **Fellows**

Dr. E. Shirl Donaldson, Faculty Member, College of Innovation and Technology, University of Michigan Flint, USA  
Dr. Joseph Mbadiwe Ogundu, President, Emerald Global Consulting Inc., Farmington Hills, Michigan, USA  
Dr. Wilkistar Otieno, Associate Professor, Department of Industrial and Manufacturing Engineering, University of Wisconsin-Milwaukee, USA

### **Global Leadership Award in Industry-Academia Engagement**

Michael Cook  
Director of Industry-Academia Engagement  
Rockwell Automation  
Milwaukee, Wisconsin

### **Lifetime Engineering Education Award**

Mr. Iftexharuddin Khan  
Industrial and Manufacturing Engineering Department  
University of Wisconsin – Milwaukee

### **Global Manufacturing Award**

Jason House  
Business Unit Manager – Mission Readiness & Protective Systems  
Northrop Grumman  
Chicago, Illinois, United States

### **Outstanding Industry Leadership Award**

Monica L. Davis  
Sr. HR Leader and Certified Professional in Human Resources (PHR)  
Delek US Holdings, Inc.  
Texas, USA

### **IEOM Distinguished Professor Award.**

Richard Olawoyin, Ph.D., P.E. CSP, F. ABET  
Professor | Industrial and Systems Engineering  
Oakland University | Rochester | MI  
US Fulbright Scholar (Alum)| Fulbright Specialist (2025-2028)

STEM Professor and Mentor | US Peace Corps Mexico

**IEOM Outstanding Teaching Award**

Dr. Pawan Bhandari  
Assistant Professor  
Department of Automotive and Manufacturing Engineering  
Minnesota State University  
Mankato, MN, USA

**Outstanding Practitioner Award**

Senthilkumar Thiyagarajan  
Sr Analyst Supply Chain  
Medline Industries, LP  
Chicago, IL, USA

**Outstanding IEOM Student Chapter Faculty Advisor Award**

Dr. Hayder Zghair  
Assistant Professor of Industrial Engineering  
Department of Engineering and Physics  
Director of Industrial Engineering Development  
College of Science and Engineering  
Southern Arkansas University  
Magnolia, Arkansas

Dr. Shahriar Hossain  
Department Head and Associate Professor  
Department of Engineering Technology  
Northwestern State University of Louisiana  
Baton Rouge, LA, USA

Dr. Yong Wang  
Associate Professor and Associate School Director  
School of Systems Science and Industrial Engineering  
Binghamton University State University of New York  
Binghamton, NY, United States

Dr. Jianxin Jiao  
Associate Professor  
George W. Woodruff School of Mechanical Engineering  
Georgia Institute of Technology  
Atlanta, GA, USA

Dr. Catherine Maware  
Assistant Professor  
Fujio Cho Engineering Technology  
University of Kentucky  
Lexington, USA

**Women in Industry and Academia Award**

Nasim Nezamoddini, Ph.D.  
Assistant Professor  
Industrial and Systems Engineering Department  
Oakland University  
Rochester, MI, USA

**Industry 4.0 Award**

Girish Kumar Gopalakrishnan  
Senior Manager – Continuous Improvement  
CNH (Case New Holland)  
Racine, WI, USA

**Innovation Award**

Sai Santhosh Goud Bandari  
Software Engineer  
Generative AI Developer of BMO  
Morrisville, NC

**STEM Award**

Maahi Mehta  
West Windsor-Plainsboro High School South  
Florida Polytechnic University  
Lakeland, FL, USA

**Supply Chain and Logistics Best Practice Award**

Minhazur Rahman Bhuiyan  
Purchase Manager  
Alif Security (Fire Alarm Houston) – Houston, TX

**Outstanding Senior Design Project Advisor Award**

Tejaskumar Vaidya  
Sr SAP APO/S4 HANA Consultant  
West Pharmaceutical Services

**Industry Solution Award**

Maheshkumar Patil  
Process Lead - Planning, Manufacturing, Operations and Distribution  
Generac Power Systems Inc.  
Milwaukee, WI, USA

**Industry Best Practice Award**

Mr. Zhongyuan Thomas Lee  
Doctoral Researcher  
Texas A&M University and Compass International Holdings (CIH)  
Texas, USA

**Industry Best Practice Award**

Sainyam Arora  
Quality Assurance and Systems Engineer  
Johnson Matthey, Catalyst Technologies  
Savannah, GA, USA

**Reliability Best Practice Award**

Tim Rautmann, CRL, PPOE1, MLT  
Director of Operations Engineering Solutions  
CINTAS Corporation  
Milwaukee, Wisconsin

**Amatrol Innovation and Curriculum Development Award**

Dr. Wilkistar Otieno  
Associate Professor  
Department of Industrial and Manufacturing Engineering  
University of Wisconsin-Milwaukee  
United States

**Innovative Industrial Engineering Curriculum Improvement Award**

Dr. Maria Auxiliadora Cannarozzo Tinoco  
Associate Professor in Industrial Engineering  
Universidade Federal do Rio Grande do Sul (UFRGS), Brazil

**Distinguished Industry Leadership Award**

Paul Perkins  
President  
Amatrol, Inc.  
Jeffersonville, Indiana  
USA

**Distinguished Industry Practitioner Award**

Joe Hamman  
Executive Director  
UWM Connected Systems Institute  
Milwaukee, Wisconsin

**Distinguished Industry Achievement Award**

Jeffrey Wood  
VP – Generac Advanced Manufacturing  
Waukesha, Wisconsin

**Distinguished Professor Award**

Dr. Jag Sarangapani  
William A. Rutledge – Emerson Electric Company Distinguished Professor  
Electrical and Computer Engineering Department  
Missouri University of Science and Technology  
Rolla, MO, USA

Dr. Anthony Rollett  
U.S. Steel Professor of Metallurgical Engineering and Materials Science and University Professor, Materials Science and Engineering  
Co-Director of the NASA STRI IMQCAM and the NextManufacturing Center  
Carnegie Mellon University  
Pittsburgh, Pennsylvania

**Outstanding Researcher Award**

Dr. Matthew Petering  
Associate Professor  
Department of Industrial and Manufacturing Engineering  
University of Wisconsin – Milwaukee (UWM)  
Milwaukee, Wisconsin, USA

**Outstanding Professor Award in SCM**

Prof. Layth C. Alwan  
Professor, Supply Chain / Operations Management & Business Statistics  
Sheldon B. Lubar College of Business  
University of Wisconsin-Milwaukee, USA

**Outstanding Professor Award**

Dr. Alejandro Hernández González  
Professor of Electrochemistry, Manufacturing Processes, and Dynamics  
Faculty of Chemical Sciences  
Universidad Juárez del Estado de Durango (UJED)  
Durango, Mexico

**Distinguished Woman in Industry and Academia Award**

Dr. Chia Youyee Vang  
UWM Vice Chancellor, Community Empowerment & Institutional Inclusivity

**Outstanding STEM Award**

Vincent E Johns Jr.  
President, Leaders Emerging and Developing (LEAD)  
Columbus, Ohio, USA

**Outstanding teaching award in project management**

Dr. Satya Aditya Akundi  
Assistant Professor  
Department of Industrial and Manufacturing Engineering  
University of Wisconsin – Milwaukee (UWM)  
Milwaukee, Wisconsin, USA

**Outstanding Conference Service Award**

Lisa McGovern  
Marketing Manager  
UWM College of Engineering and Applied Sciences

Madiha Ahmed  
Teaching Faculty, Industrial and Manufacturing Engineering  
UWM, Milwaukee, WI, USA

**Outstanding Student Leadership Award**

Sofia Lillie Kaye, B.S. Student in Computer Science, University of Wisconsin -Milwaukee  
Faria Bhuiya, M.S. Student in Mechanical Engineering, University of Wisconsin -Milwaukee  
Sajede Farahani, Ph.D. Student in Industrial Engineering, University of Wisconsin -Milwaukee  
Raisa Nkweteyim, Ph.D. Student in Computer Science, University of Wisconsin -Milwaukee  
Hafiz Noman Javad, MS Student in Data Analytics, Southern Arkansas University, United States

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## **Competition Winners**

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### **Graduate Student Paper Competition Sponsored by EATON Corporation – Online**

First Place

**ID 85 CNC Machine Selection Using Annual Cash Flow Analysis for a Medical Device Machine Shop**

Alexander Collado-Méndez and Michaela F. Williams, PhD Student, Bailey College of Engineering and Technology, Indiana State University, Terre Haute, Indiana, USA

Simran Dhingra, MS Graduate, Bailey College of Engineering and Technology, Indiana State University, Terre Haute, Indiana 47809, USA

M. Affan Badar, Professor, Bailey College of Engineering and Technology, Indiana State University, Terre Haute, Indiana 47809, USA

Second Place

**ID 223 Preparation and Quality Evaluation of Cookies Incorporated with Chickpea and Corn Flour**

Aakriti Kuikel, Kinesiology, Health, Food & Nutritional Sciences Department, University of Wisconsin, Stout, Menominee, WI, USA

Yaman Pandey, Department of Automotive and Manufacturing Engineering, Minnesota State University, Mankato, MN, USA

Pawan Bhandari, Ph.D., Professor, Department of Automotive and Manufacturing Engineering, Minnesota State University, Mankato, MN, USA

Third Place

**ID 165 Integrating Smart Thermostat and Weather Forecasting Data for Real-Time HVAC Efficiency Optimization in Residential Buildings**

Yaman Pandey, Department of Automotive and Manufacturing Engineering, Minnesota State University, Mankato, MN, USA

Pawan Bhandari, Professor, Department of Automotive and Manufacturing Engineering, Minnesota State University, Mankato, MN, USA

## **AI-ML Competition - Online**

First Place

**ID 154 Active Learning for Scalable Set-Based Design in High-Dimensional End-State Spaces**

Roohollah Jahanmahin, Sara Masoud, Murat Yildirim, Evrim Dalkiran, Ratna Babu Chinnam and Alper Murat, Department of Industrial & Systems Engineering, Wayne State University, Detroit, MI, USA

Suzan Arslanturk, Department of Computer Science, Wayne State University, Detroit, MI, USA

Maryam Eghbalzarch, Assistant Professor, Department of Industrial & Systems Engineering, Kennesaw State University, Kennesaw, GA, USA

Neda Masoud, Associate Professor, Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor, MI, USA

Second Place

**ID 131 Lightweight Machine Learning-Based Dynamic Load Balancing for Distributed Object Storage Systems**

Naman Subedi, Bo Sun, MD Masud Rana and Frank Sun, Department of Computer Science, Lamar University, Beaumont, Texas, USA

Helen H. Lou, Dan F. Smith Department of Chemical & Biomolecular Engineering, Center for Data Analytics and Cybersecurity, Lamar University, Beaumont, Texas, USA

Alek Hutson, Center for Midstream Management and Science, Lamar University, Beaumont, Texas, USA

## **Lean Six Sigma Competition - Online**

First Place

**ID 15 Mechanical Design Cost Reduction Medical Simulator**

Jenny Yang, Ananya Deshpande, Meghana Ramoju, Raj Sachar and Professor Avinash Gupta, University of Illinois at Urbana-Champaign, USA

## **Simulation Competition - Online**

First Place

**ID 249 Design and Development of a Borehole Water Pump for Rural Areas**

Brainy Motolla, M. E. Matlakala and D. V. V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

## **Doctoral Dissertation Competition sponsored by Airbus - Online**

First Place

**ID 216 A Policy-Based Rough Optimization with Large Neighborhood Search for Dual-Resource Flexible Job Shop Scheduling Under Time-of-Use Electricity Tariffs**

Saurabh Singh, PhD Candidate and Teaching Assistant, Department of Industrial, Systems & Manufacturing Engineering, Wichita State University, Wichita, KS, USA

Ehsan Salari, Associate Professor, Department of Industrial, Systems & Manufacturing Engineering, Wichita State University, Wichita, KS, USA

Deepak Gupta, Professor, Department Chair, and Graduate Coordinator, Department of Industrial, Systems & Manufacturing Engineering, Wichita State University, Wichita, KS, USA

Second Place

**ID 36 From Probes to Causal Econometrics: A Rigorous Path to Mechanistic Interpretability in Dynamical AI Systems**

Mohsen Selseleh, Doctoral Student in Economics, Universidad Nacional de Educación a Distancia (UNED), Spain

Third Place

**ID 385 Calibrating Digital Twins in Rapidly Changing Systems**

Yongseok Jeon, North Carolina State University, United States

**ID 361 Leveraging Lean Six Sigma Methodologies to Bridge the Middle-Skills Gap in Advanced Manufacturing: A Quantitative Evaluative Study**

Taylor Starr, Doctoral Student, Texas A&M University, United States

## **Global Design Competition sponsored by Amatrol Inc. - Online**

First Place

**ID 323 Zero Code AI: Transforming K 12 STEM Education through No Code Robotics and Innovation**

Unais Ali and Muhammad Ahmed, Department of Engineering Management, Eastern Michigan University, Ypsilanti, MI 48075, USA

Syeda Kashaf Kulsoom, Chief Technology Officer, UTech Digital Education, Karachi, Sindh, Pakistan

## **Human Factors and Ergonomics Competition – Online**

First Place

**ID 312 Behavioral Determinants of Occupational Safety Implementation in Indonesian Nickel Mining**

Nur Ilmi Aulia Ahlan, Student of Department of Mining Engineering, Faculty of Engineering, Hasanuddin University, Makassar, South Sulawesi, Indonesia

Aryanti Virianti Anas, and Rini Novrianti Sutardjo Tui, Lecturer of Department of Mining Engineering, Faculty of Engineering, Hasanuddin University, Makassar, South Sulawesi, Indonesia

### **Supply Chain and Logistics Competition sponsored by aThingz – Online**

First Place

**ID 337 An Integrated Multi-Level Strategic Framework for Warehouse Location Selection in Rapidly Growing Distribution Networks**

Ngurah Ayu Sekar Putri Dewi Hapsari, Lead Operations Process Engineer, BSc Industrial Engineering & Management, Fontys University of Applied Sciences Eindhoven, De Rondon 1, 5612 AP Eindhoven, Netherlands  
Muhamad Fariz Failaka, Department of Chemical Engineering, University of Waterloo, Waterloo, ON N2L 3G1, Canada

Second Place

**ID 380 Lean-Driven Supply Chain Optimization via Multi-Agent Integrated Machine Learning**

Manonmani Sekar, Nasim Nezamodini, Industrial & System Engineering, Oakland University, Rochester Hills, MI, United States

### **High School STEM Competition - Online**

First Place

**ID 330 Bio-based Materials for Moisture-Resistant Refugee Housing: A Comparative Study of Cork, Timber, and Bamboo**

Varsha Ayalasomayajula, Student, The Madeira School, Great Falls, VA, USA

Second Place

**ID 208 GridGuardian: A National-Scale Digital Twin Utilizing Multi-Head Self-Attention Bi-LSTMs and Physics-Based Simulations for Power Grid Resiliency**

Aditya Vengata, and Srivanth Dasu, High School Team, United States

Third Place

**ID 38 A High-Performance Simulation Framework for Accelerating the Design of Origami-Inspired Structures**

Leon Le, Student Researcher, The Harker High School, San Jose, CA, USA

### **Graduate Student Paper Competition Sponsored by EATON Corporation – Onsite**

First Place

**ID 166 Reliability Analysis of High-Speed Machine Vision Inspection in Automated Bottling Systems: A Comparative Study of Static vs. Dynamic Performance**

Sesha Raghavendra Srinivas Subnivas, Doctoral Research Student, Mechatronics, Department of Engineering Technology, Purdue University Northwest (PNW), Hammond, IN, USA

Lokesh Rao Gujja, Department of Engineering Technology, Purdue University Northwest (PNW), Hammond, IN, USA

Maged Mikhail, Professor, Department Chair, Engineering Technology, Purdue University Northwest, Hammond, IN 46323, USA

Second Place

**ID 331 Automating Six Sigma Project Selection Through Analytic Network Process**

Michael Carr, PhD Candidate, Department of Industrial and Systems Engineering, Oakland University, Auburn Hills, MI, USA

Nasim Nezamodini, Professor, Department of Industrial and Systems Engineering, Oakland University, Auburn Hills, MI, USA

Third Place

**ID 182 Predicting and Reducing Product Returns in Modern Retail**

Henry Ndeleko and Hayder Zghair, Southern Arkansas University, United States

Fourth Place

**ID 260 Toward Integrated AI-Powered Autonomous Agents for End-to-End Data Analysis and Task Automation**

Hafiz Noman Javad, Praneet Kc and Hayder Zghair, Southern Arkansas University, United States

### **Master's Thesis Competition - Onsite**

First Place

**ID 59 Geothermal Surface-Water Use in Lake Michigan: Intake Siting and Life-Cycle Decision Framework for Discovery World (Milwaukee, WI)**

Madison Roeber, Milwaukee School of Engineering / Architectural Engineering - Building Mechanical Systems (BMS), United States

Brian J Pfeifer, United States

### **AI-ML Competition - Onsite**

First Place

**ID 43 Function-Space Priors for Behavioral Regularization of Control Parameters in Neural Decision Models**

Mayra Bornacelly, PhD Student, Industrial Engineering, Department of Industrial Engineering & Management Systems, University of Central Florida, Orlando, FL, USA

Second Place

**ID 286 AI-Based Automated Writing Feedback System for Student Improvement**

Taha Nazir, Independent Researcher, United States

## Poster Competition I

First Place

**ID 164 Productivity Improvement and Operational Efficiency in Office Furniture Manufacturing: A Work Study Case in Northeastern México**

Elva Patricia Puente-Aguilar, María de los Ángeles Martínez-Mercado, Azucena Minerva García-León, Arlethe Yari Aguilar-Villarreal and Nury Margarita Leal-Rendón, Department of Industrial Engineering and Management, School of Chemical Science, Universidad Autónoma de Nuevo León, San Nicolás de los Garza, Nuevo León, México

Second Place

**ID 155 Chiller Assembly Line Optimization Using a Six Sigma DMAIC Approach**

Azucena Minerva García-León, Iván Guillermo González-Palomo, Carolina Solís-Peña and Patricia Gómez-Fuentes, Professor of Industrial Engineering and Management, School of Chemical Science, Universidad Autónoma de Nuevo León, San Nicolás de los Garza, Nuevo León, México

Third Place

**ID 161 Analysis of Increased Production Capacity in a Manufacturing Company Using the A3 Report**

María de los Ángeles Martínez-Mercado, Elva Patricia Puente-Aguilar, Daniela del Carmen Bacre-Guzmán and Argelia Vargas-Moreno, School of Chemical Science, Professors of Industrial Engineering and Management, Universidad Autónoma de Nuevo León, San Nicolás de los Garza, Nuevo León, México

## Poster Competition I

First Place

**ID 190 Digitizing Manufacturing Systems through Digital Twin Driven Virtual Platform**

Faria H Bhuiya and Ilya Avdeev, University of Wisconsin-Milwaukee, United States

Second Place

**ID 156 Digital Twin Experimentation to Evaluate the Complementarity Between Lean Maturity and Industry 4.0 Adoption**

Mauricio Torres-Torres, Azucena Minerva García-León, Elí González-Trejo and Soraya Concepción Elizondo-Jiménez, School of Chemical Science Professors of Industrial Engineering and Management, Universidad Autónoma de Nuevo León, San Nicolás de los Garza, Nuevo León, México

Third Place

**Niran John Carroll**

## Undergraduate Student Paper Competition Sponsored by SIEMENS - Onsite

First Place

**ID 53 Strategic and Operational Improvement in a Mexican high-volume distribution center**

Ana Torres and Claudia Pizano, Undergraduate Students, Department of Chemical, Industrial and Food Engineering, Universidad Iberoamericana - Mexico City (IBERO), Mexico City, México

Oroselia Sánchez and Erick Torres, Professors, Department of Chemical, Industrial and Food Engineering, Universidad Iberoamericana Mexico City, México

Second Place

**ID 435 STEM Skills Disconnect: Academic Syllabi Vs. Job Market**

Seema Powar, Southern Arkansas University, Magnolia, Arkansas, 71753, USA

Sana Bhimani, Southern Arkansas University Tech, East Camden, Arkansas, USA and Southern Arkansas University, Magnolia, Arkansas, USA

Hayder Zghair, Southern Arkansas University, Magnolia, Arkansas, USA

## Senior Capstone Design Project Competition - Onsite

First Place

**ID 162 Interactive Outdoor Learning Center: Smart Irrigation for Hands-On STEM Learning**

Brad Powell, Brett Brady, Spencer Yellott, Sterling Player, Craig Caskey, Xinjia Chen and Md Shahriar Hossain, Department of Engineering Technology, Northwestern State University, Natchitoches, LA 71457, USA

Second Place

**ID 277 Compressed Air Monitoring System (CAMS)**

Andrew Day, Huy Lai, Anthony Inderhees and Rob Speckert, Miami University, Cincinnati, Ohio, United States

## High School STEM Competition - Onsite

First Place

**ID 390 Low-Cost Ear-Wearable Physiological Monitoring System with CNN-LSTM Anomaly Detection for Early Stroke Risk Pattern Detection**

Pritika Ganguly, Student at Metea Valley High School, Aurora, IL, USA

Second Place

**ID 167 Present Bias and Short-Form Content Addiction on Social Media Platforms: A Game-Theoretic Model**

Yilin Guo, College Park High School, The Woodlands, TX, United States

Third Place

**ID 285 AI-Powered Writing Feedback System for Student Improvement**

Taha Nazir, Independent Researcher, United States

## **Undergraduate Student Paper Competition Sponsored by SIEMENS (Part I) - Online**

First Place

**ID 16 Defect Rate Reduction Through the Application of Standard Work, BPM and Poka Yoke in an SME in the Plastics Sector**

Mathias Panta-Diaz, Luciana Nina-Silva, Gino Viacava-Campos and Jorge Antonio Corzo-Chavez, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Perú

Second Place

**ID 61 Improving Production Efficiency in a Chocolate SME through Continuous Flow, SMED and Poka-Yoke**

Camila Panta-Mejia, Katya Pino-Ore, Gino Viacava-Campos and Jorge Antonio Corzo-Chavez, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Perú

Third Place

**ID 67 Optimization of Service Level through Machine Learning, Linear Programming, and Standard Work in a Dark Kitchen**

Esteban Puerta-Román, Cielo Luis-Barreto, Gino Viacava-Campos and Jorge Antonio Corzo-Chavez, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Perú

## **Undergraduate Student Paper Competition Sponsored by SIEMENS (Part II) - Online**

First Place

**ID 87 Year-Long Senior Design Project Experience for Solving Practical Industry Problems in the Engineering Technology Program**

María A. Fariña, Student, Department of Engineering Technology, Northwestern State University of Louisiana, Natchitoches, LA 71497, USA  
Md Shahriar J. Hossain, Department Head and Associate Professor, Department of Engineering Technology, Northwestern State University of Louisiana, Natchitoches, LA 71497, USA

Second Place

**ID 365 Capability-Based Framework for Standardizing Maintenance and Knowledge Management in Military Ground Support Equipment: Case Study in the Colombian Aerospace Force**

Sandra Milena Vargas Sarmiento, Engineering Student, Department of Industrial Engineering & Basic Sciences, Central University, Bogotá, Colombia

Hector Manuel Avila Sierra, Magister in Integrated Logistics Management and International Trade, Director of the Industrial Engineering Program, Central University, Bogotá, Colombia

Bayron Steve Ruiz Niño, Captain, Magister in Management and Design of Process, Aeronautical Logistics Directorate, Colombian Air Force Bogotá D.C., Colombia

## **Undergraduate Research Competition sponsored by Daikin Applied - Online**

First Place

**ID 88 Study of optimal environmental parameters of classroom settings for elementary school education**

María A. Fariña, Student, Department of Engineering Technology, Northwestern State University of Louisiana, Natchitoches, LA 71497, USA  
Md Shahriar J. Hossain, Department Head and Associate Professor, Department of Engineering Technology, Northwestern State University of Louisiana, Natchitoches, LA 71497, USA

Michelle Morris, Professor, School of Education, Northwestern State University of Louisiana, Natchitoches, LA 71497, USA

Second Place

**ID 398 A Low-Power ESP32-Based Light Status Logging System for Environmental Monitoring and Smart Space Applications**

Praneet Kc and Hayder Zghair, Southern Arkansas University, Magnolia, Arkansas, USA

## **Senior Capstone Design Project Competition - Online**

First Place

**ID 321 An Integrated Production and Supply Chain Simulation Framework for Analysis of Complex Manufacturing Systems**

Grant Robertson, Maxime Morkos and Agilan Anand, Grado Department of Industrial and Systems Engineering, Virginia Polytechnic Institute and State University, Blacksburg, VA 24060, USA

Esra Büyüktaktakin, Professor, Grado Department of Industrial and Systems Engineering, Virginia Polytechnic Institute and State University Blacksburg, VA, USA

Randolph L. Bradley, Senior Technical Fellow, The Boeing Company, San Francisco, CA, USA

Second Place

**ID 288 ResiClean: Automated Post-Processing System for Resin 3D Printing**

Mya Alford, Minelis Brito, Chiemeka Osiagwu, Bershell Reynaud and Amaya Simpson, United States

**ID 335 End-to-End Computer Vision Pipeline for Perforation Defect Detection and Classification in Industrial Imaging**

Joanne Yun, Hasnaa Ouidadi, Khawlah Alharbi, Pengyu Zhang and Hantang Qin, Department of Industrial and Systems Engineering, Data Science Institute Affiliates, University of Wisconsin-Madison, USA

Third Place

**ID 10 Visual Attention and Comprehension Across Chart Types: An Eye-Tracking Analysis**

Isaiah Thompson and Quintrae Haynes, Department of Engineering, South Carolina State University, SC, USA  
 Younho Seong, Department of Industrial & Systems Engineering, North Carolina A&T State University, NC, USA  
 Sun Yi, Department of Mechanical Engineering, North Carolina A&T State University, NC, USA  
 Seung Oh, Department of Engineering, South Carolina State University, SC, USA

**Human Factors, Ergonomics and Health Systems - Online**

First Place

**ID 325 A Multi-Layer Adaptive Architecture Driven by Case-Based Reasoning for Post-Discharge Care**

Yiyun Fei, Mulang Song, Hannah Lin and Roger Jiao, Mechanical Engineering, Georgia Institute of Technology, Atlanta, Georgia, USA

Second Place

**ID 261 Human-in-the-Loop Decision Support for Water-Quality Monitoring Using Interpretable Machine Learning**

Azeez Adamolekun, Department of Industrial & Systems Engineering, North Carolina A&T State University, Greensboro, NC, USA  
 Clement Alabi, Department of Industrial & Systems Engineering, North Carolina A&T State University, Greensboro, NC, USA  
 Younho Seong, Prof., Department of Industrial Engineering & Systems Engineering, North Carolina A&T State University, Greensboro, NC, USA  
 Sun Yi, Professor, Department of Mechanical Engineering, North Carolina A&T State University, Greensboro, NC, USA  
 Dongyang Deng, Associate Professor, Department of Built Environment, North Carolina A&T State University, Greensboro, NC, USA

Third Place

**ID 205 Assessment of Walking Ability in Parkinson's Patients using Three-Dimensional Plantar Pressure Sensors**

Tianrui (Terry) Zhang, High School Junior, Industrial & Manufacturing Engineering, Kent School, Kent, CT, USA

Fourth Place

**ID 86 Ergonomics Sensing in Industry 5.0 Human-Robot Collaboration: Current Trends and Future Directions**

Goksu Avdan, Assistant Professor, Department of Engineering Technology, Missouri Western State University, St. Joseph, MO, USA

**Best Track Papers**

Track ID	Track name	Best Track Paper ID	Paper Title	Country
1	Artificial Intelligence and Data Science	80	Short-Term Medicaid Dropout Prediction Using Longitudinal Weekly Eligibility Data and Interpretable Machine Learning Models	USA
2	Automation, Robotics and Autonomous Systems	212	Multichannel Acoustic Feature Fusion for Predictive Maintenance in High-Speed Robotic Manufacturing	USA
3	Business Management and Operations Management	259	Model to Improve Productivity in Footwear Manufacturing through PM, 5S, SW and SLP	Peru
4	Digital Manufacturing, Industry 4.0 and IoT	65	Proposal of a model for evaluating the maturity of Industry 4.0 implementation in the steel industry	Portugal
5	Engineering Education and Curriculum Improvement	48	Problem-Based Learning to Support Active Learning in an Undergraduate Industrial Engineering Course	Brazil
6	Engineering Management and Project Management	119	Probability Distribution Selection in Monte Carlo Based Project Schedule Simulation of Highly Parallel Task Structures	USA
7	Entrepreneurship and Innovation	254	Science, Technology, and Digital Transformation: Educational Innovation Strategies for Entrepreneurship Development	Colombia
8	Facility Planning and Layout	83	Beyond Spatial Optimization: An Integrated Multi-Method Framework for Manufacturing Layout Redesign	Mexico
9	Human Factors, Ergonomics and Healthcare System Management	325	A Multi-Layer Adaptive Architecture Driven by Case-Based Reasoning for Post-Discharge Care	USA
10	Lean Six Sigma and Operations Excellence	194	Application of Lean Principles to Reduce Waste in the Stamping Process of Automotive Parts	Thailand
11	Manufacturing, Assembly and Design	60	Integrating Production and Repair Operations Through Data Driven Defect Flow Analytics for Yield and Resource Optimization in PCBA Manufacturing	USA

## IEOM Society Awards – 11<sup>th</sup> North American IEOM Conference, Milwaukee, June 8-11, 2026

12	Quality, Reliability and Maintenance	406	Dynamic ARIMA Mixture Modeling (DARIMA-MM) for Forecasting Time-Varying Nanoparticle Shape Distributions	USA
13	Simulation, Optimization and Productivity Improvement	237	Building Trust in Black-box Optimization: A Comprehensive Framework for Explainability	USA
14	Supply Chain and Logistics	90	Robust Vendor Managed Inventory Optimization with Stochastic Nonlinear Inverse Demand: A Data-Driven Swarm Intelligence Approach	Iran
15	Sustainability, Green Systems and Energy	293	Sustainable Development and Green Job Creation in Canada EV Battery Recycling	Canada
16	Case Studies and Best Practices	384	Risk Management Process - Production Best Practice Case study Longfield Gas Plant Accident	USA

### Best Papers - IEOM ICSCML

First IEOM International Conference on Supply Chain Management and Logistics (ICSCML 2026), Milwaukee, USA, June 8-11, 2026

Place	Best Track Paper ID	Paper Title	Country
First	287	A Tariff Exposure Propagation Index for Measuring Hidden Supply-Chain Vulnerability: Evidence from the 2025–2026 U.S. Tariff Shock	USA
Second	274	Industry 4.0, Lean Subsystems, and the Productivity-Resilience Dilemma in Saudi Arabian Supply Chains: A Socio-Technical Systems Analysis	Saudi Arabia
Third	284	Exploring the Interplay between International Trade and Industry 5.0: The Role of Collaboration	Brazil



## Sponsors and Partners



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**Industrial Engineering and Operations Management Society International**