



2025 IEOM India Conference
Industrial Engineering and Operations Management Conference
Vellore, Tamil Nadu, India, November 6-8, 2025
Venue: Vellore Institute of Technology (VIT), Vellore

Transformative Education Leadership Award

Dr. G. Viswanathan
Honourable Founder and Chancellor, VIT

Distinguished Educator Award

Prof. Krishnaswami Srihari
SUNY Distinguished Professor
School of Systems Science and Industrial Engineering
Binghamton University, New York, USA

Outstanding Professor Award

Prof. Berit Irene Helgheim
Associate Professor in Logistics
Molde University College, Norway

Outstanding Professor Award

Prof. Sandeep Mondal
Professor, Department of Management Studies and Industrial Engineering
Indian Institute of Technology (IIT), Dhanbad
Jharkhand, India

Outstanding Professor Award

Prof. Venkatesh V. G.
Vice-Dean (Global Faculty Engagement) and Professor of SCM
EM Normandie Business School, France

Outstanding Professor in Supply Chain Management Award

Prof. Niles Perera
Professor of Supply Chain Management
University of Moratuwa, Sri Lanka

Distinguished Academic Leadership Award

Dr. V. S. Kanchana Bhaaskaran
Vice-Chancellor, Vellore Institute of Technology (VIT)
Vellore, India

Distinguished Educator Award

This award is presented to

Professor Dr. Kuppan P
Dean of the School of Mechanical Engineering (SMEC)
Vellore Institute of Technology (VIT), Vellore, India

Distinguished Educator Award

Dr. Mary Cherian
Dean, VIT Business School
Vellore Institute of Technology, Vellore, India

Distinguished Conference Leadership Award

Dr. Jayakrishna Kandasamy
Professor, School of Mechanical Engineering
Vellore Institute of Technology (VIT), Vellore, India

Outstanding Conference Leadership Award

Dr. Subashini R
Associate Professor, VIT Business School
Vellore Institute of Technology, Vellore, India

Outstanding Woman in Industry and Academia Award

Dr. Manasi Vyankatesh Ghamande
Assistant Professor, Vishwakarma Institute of Technology
Pune, India

Competition Winners and Best Track Papers

5th IEOM India International Conference on Industrial Engineering and Operations Management
Vellore, Tamil Nadu, India, November 6-8, 2025
Host: Vellore Institute of Technology (VIT), Vellore, Tamil Nadu, India

Undergraduate Student Paper Competition sponsored by Siemens

Part I

First Place

ID 99 Factors Affecting the Purchasing Intention of Filipino Gen Zs in the Greater Metro Manila Area when Purchasing Sustainable Products on E-commerce Platforms

Lilyanna F. De Guzman, Annarose Pamela C. Ricaro, Emilio Luis R. Roman and Carlos Andrei A. Tesoro, University of Santo Tomas, Philippines

Second Place

ID 161 Sustainability by Green System: A Habitable Environment with Terrarium for Growing Garlic and Coriander

Sampada Subodh Juikar, College of Architecture, Vivekanad Education Society, Chembur, Mumbai, Maharashtra, India
Swayam Chidanand Melkonde, College of Information Technology, Vivekanad Education Society, Chembur, Mumbai, Maharashtra, India
Kalyani Kishore Patil, College of Information Technology, K J Somiya Institute of Technology, Vidyavihar, Mumbai, Maharashtra, India
Chaitanyaa Vaibhav Hegishte, College of Information Technology, Vidyalkar Institute of Technology, Wadala, Mumbai, Maharashtra, India

Third Place

ID 57 Lean Production Model to Improve OTIF Using 5S, Standardized Work and TPM in a Footwear SME: A Case Study

Jasmine Ashely Osorio-Diaz, Joshely Kiara Marcos-Lopez, Jorge Antonio Corzo-Chavez and Gino Viacava-Campos, Carrera de Ingeniería Industrial, Universidad de Lima, Lima, Peru

Part II

First Place

ID 316 Determining the Risk Factors Affecting the Work-Related Musculoskeletal Disorders Among Provincial Air-Conditioned Bus Drivers in Metro Manila Bus Hubs

Daniela Ysabel F. Peña, Aaron Zed DV. Remata, Andrea Rollainne L. Tamba, and Carlos Ignacio P. Lugay Jr., Industrial Engineering Department, Faculty of Engineering, University of Santo Tomas, Manila, Manila, Philippines

Second Place

ID 379 Neurowell – An Ai Powered Early Mental Health Detection and Support System: A Review

Mohammad Nasiruddin, Aliza Umam Khatib, Roshani Zahera Dossani, Saniya Anjum Khan, and Shreeya Sapate, Department of Electronics & Telecommunication Engineering, Anjuman College of Engineering and Technology, Nagpur, Maharashtra, India

Third Place

ID 473 Smart Window – Design and Development of a Multi-Feature IoT-Based Smart Window System: A Review

Akbar Nagani, Alfez Khan, Saishree Zade, Amin Sheikh, and Aniruddha Janbandhu, Department of Electronics & Telecommunication Engineering, Anjuman College of Engineering and Technology, Nagpur, Maharashtra, India

Undergraduate Research Competition sponsored by Daikin Applied

First Place

ID 387 A Scalable Edge-IoT Framework for Web-Controlled Home Automation: Integration of Raspberry Pi and ESP32

Shantanu Patne, Anjuman College of Engineering and Technology, India

Second Place

ID 444 Postural Analysis of CNC Machine Operators by Ergonomic Assessment Tools RULA and REBA

Gunderaya, Qutubuddin S.M. and Saniya and Laxmi, Dept. of Industrial & Production Engineering, P.D.A. College of Engineering, Kalaburagi, India
Fatima Firdous Nikhat and Umme Salma, Faculty of Engineering, KBN University, Kalaburagi, India

AI-ML Competition

First Place

ID 366 A Comprehensive Review on the Applications of Explainable Artificial Intelligence in Healthcare, Agriculture, and Beyond

Ayesha Fatima, and Saheba Aijaz, Student, Stanley College of Engineering & Technology for Women, Hyderabad, India
S.M. Hasanuddin, Student, Methodist College of Engineering and Technology, Hyderabad, India
Umaira Shahneen, Student, Faculty of Engineering, Sharnbasva University, Kalaburagi, India
Namra Mahveen, Student, Faculty of Medicine, Khaja BandaNawaz University, Kalaburagi, India
Umaima Farzeen Khan, Student, Faculty of Medicine, Khaja BandaNawaz University, Kalaburagi, India
Qutubuddin Syed Mohammed, Professor, Industrial & Production Engineering, P.D.A. College of Engineering, Kalaburagi, India

Second Place

ID 386 Parkitnow Raspberry Pi Integration with IR Sensors for Smart Parking and Online Booking System: A Review

A.S. Khan, Mohammad Sohel Ali, Anuj Yadav, Arshad Sheikh, and Mohammad Farukh Qureshi, Department of Electronics & Telecommunication Engineering, Anjuman College of Engineering and Technology, Nagpur, Maharashtra, India

Third Place

ID 275 AI and Emotion: Mapping Mental Health through Social Media Language

Umaira Shahneen, Student, Faculty of Engineering, Sharnbasva University, Kalaburagi, India
Namra Mahveen, Student, Faculty of Medicine, Khaja BandaNawaz University, Kalaburagi, India
Umaima Farzeen Khan, Student, Faculty of Medicine, Khaja BandaNawaz University, Kalaburagi, India
S.M. Hasanuddin, Student, Methodist College of Engineering and Technology, Hyderabad, India
Ayesha Fatima, Student, Stanley College of Engineering & Technology for Women, Hyderabad, India
Qutubuddin Syed Mohammed, Professor, Industrial & Production Engineering, P.D.A. College of Engineering, Kalaburagi, India

Graduate Student Paper Competition sponsored by Eaton Corporation

First Place

ID 93 Optimal Capacity Addition in Indian States for Food Corporation of India

Atul Sharma, and Nomesh B Bolia, Mechanical Engineering Department, Indian Institute of Technology (IIT) Delhi, Hauz Khas, New Delhi, India

First Place

ID 23 Impact of AI in employer branding on talent acquisition in the Delhi-NCR region
Vidushi Chaturvedi, JKBS, India

Doctoral Dissertation Competition sponsored by Airbus

First Place

ID 414 The Orchestration Advantage: How GSI-ISV Triangulation, Servitization, and Next-Gen Alliance Management Drive Disruptive Business Outcomes for Global Enterprises
Ramanath Koppam Suryaprakash, PhD Candidate, Business Management, BEST Innovation University (BESTIU), India

Second Place

ID 167 Public Engagement and Sentiment Analysis of Social Media Content Generated by Organizations on Electric Vehicles
Gaurav Sharma, Vinod Gupta School of Management, Indian Institute of Technology Kharagpur, West Bengal, India
Swagato Chatterjee, School of Business and Management, Queen Mary University of London, London, UK

High School STEM Competition

First Place

ID 382 Selective Dynamic Glare Blocking Eyewear
Aakash, Founder, Aha 3D innovations Pvt. Ltd., Jaipur, Rajasthan, India
Deshna Sharma, Student, Jayshree Periwai International School, Jaipur, Rajasthan, India

Second Place

ID 96 Strategic Vaccination Behavior and the Public Goods Dilemma in a Game Theoretic Model Using Measles Data
Prachet Patakula, Manthan School, Hyderabad, Telangana, India

Third Place

ID 92 “Neuro-Plan Fusion” Brain-Inspired AI for Intelligent and Self-Optimizing Agriculture.
Chandraveer Datt More, Middle school student, SRN Mehta CBSE School, Kalaburagi, Karnataka, India

ID 392 Yojana Setu: A Bridge Between Innovation and Service
Amrit Miglani, Ansh Singhal, Aarnav Gureja, and Atharvva Sahni, Lotus Valley International School, Noida, India

Poster Competition

First Place

ID 113 Navigating Barriers to Aquaponics Adoption: Building Sustainable Supply Chains in Indian Agriculture
Ananya Varkhedkar, Satyam Kumar, and Akhilesh Barve, Department of Mechanical Engineering, Maulana Azad National Institute of Technology, Bhopal, Madhya Pradesh, India

Second Place

ID 280 Process Improvement and Safety Enhancement in Prefabrication: Industrial Insights from Yanmar Training
Madhav Laroyia, College of Agricultural Engineering & Technology, PAU Ludhiana, Punjab, India

Undergraduate Student Paper Competition sponsored by Siemens

Part III

First Place

ID 274 Modeling and Analysis of Hopper for Smart Ration Distribution System
Kalleti Venkatesh Goud, III Year -Dept. of Mechanical Engineering, Hyderabad Institute of Technology and Management, Hyderabad, India
Zuriah Syed, Asst. Professor, Dept. of Mechanical Engineering, Hyderabad Institute of Technology and Management, Hyderabad, India
G. Shiva Sai Nikhil, G. Naveen, K. Rahul, S. Narendra, P. Sai Kiran Reddy, III Year – Dept. of Mechanical Engineering, Hyderabad Institute of Technology and Management, Hyderabad, India

Second Place

ID 158 Real-Time Accident Monitoring and Management System for Traffic Flow using Live CCTV Data with Prioritized Navigation Assistance for Emergency Response
G. S. Kamalesh, School of Mechanical Engineering Vellore Institute of Technology, Vellore, Tamil Nadu, India

Sathvi V, School of Civil Engineering, Vellore Institute of Technology, Vellore, Tamil Nadu, India
R K Lalit Yashwant, School of Civil Engineering, Vellore Institute of Technology, Vellore, Tamil Nadu, India
Sakthivel Azhakiyamanavalan, School of Social Science and Languages Vellore Institute of Technology, Vellore, Tamil Nadu, India
Sasanka Bhushan Pulipati, Associate Professor, School of Civil Engineering Vellore Institute of Technology, Vellore, Tamil Nadu, India

Third Place

ID 18 A 3-in-1 Hybrid Tractor System: Integrating Military-Grade CRDI, On-Farm Hydrogen Production, and Ethanol Blending for Sustainable Agriculture

Madhav Laroyia, Pau, Ludhiana, India

Simulation Competition

First Place

ID 426 Design and Simulation of a Low-Power Voltage Regulator Circuit for Power ICs Using CMOS Technology

Hari Haran, Bala Murugan, and Arish Arish, K. Ramakrishnan College of Technology, India

Second Place

ID 423 Reliability of wire bonding under temperature cycling

Vishal A, Shakthivishesh N, and Thanishkumar K, K. Ramakrishnan College of Technology, India

Third Place

ID 427 Detection of leakage in dielectric layers

Vengadesh T, Hariprasth M, and Harish Ragavendhra S M, K. Ramakrishnan College of Technology, India

ID 10 A Data-Driven Investigation into Thrombotic Stroke Among Adults of Kerala – A Multivariate Analysis

Nitheesh K Menon, Government Engineering College, Thrissur, M. Tech in Industrial Engineering and Management, India

Human Factors and Ergonomics Competition

First Place

ID 385 Ornavision, A Biomimetic Ornithopter for Real-Time Monitoring and Security: A Review

Mohammad Nasiruddin, Adesh Dahat, Tejas Tatte, Yash Bhagat, and Pranav Parate, Department of Electronics & Telecommunication Engineering
Anjuman College of Engineering and Technology, Nagpur, Maharashtra, India

Second Place

ID 377 Ergonomic Risk Factors and Safety Issues in Metal Working Industries-A Case Study of LPG Cylinder Manufacturing Unit in Karnataka

Md. Aslam, Qutubuddin S.M., Kalpana, and Gunderaya, Industrial & Production Engineering, P.D.A. College of Engineering, Kalaburagi, India
Fatima Firdous, Faculty of Engineering, KBN University, Kalaburagi, India

Third Place

ID 411 A Survey on Knowledge, Attitude and Practice of Ergonomics among Engineering Students in North Karnataka

Kalpana, Student, Industrial & Production Engineering, PDA College of Engineering, Kalaburagi India
Qutubuddin S.M., Professor, P.D.A. College of Engineering, Kalaburagi, India
Md.Asiam, Student, Industrial & Production Engineering, PDA College of Engineering, Kalaburagi India
Gunderaya, Industrial & Production Engineering, P.D.A. College of Engineering, Kalaburagi, India
Umaira Shahneen, Student, Faculty of Engineering, Sharnbasva University, Kalaburagi, India

Supply Chain and Logistics Competition sponsored by aThingz

First Place

ID 383 Product Demand Forecasting Using Stacked Machine Learning Techniques

Mrinalini T, Hema Priya K and Savitha A, Student, M.Sc. Data Science, School of Advanced Sciences, Vellore Institute of Technology - Chennai
Kelambakkam - Vandalur Rd, Rajan Nagar, Chennai, Tamil Nadu, India
Dhanasekar S, Associate Professor, School of Advanced Sciences, Vellore Institute of Technology – Chennai, Chennai, Tamil Nadu, India

Second Place

ID 249 Platform Based Supply Chain Coordination: A Bibliometric Analysis and Future Research Directions

Mayank Pathak, Indian Institute of Management, Sambalpur, India
Rohit Gupta, Operations Management, IIM Sambalpur, India

Third Place

ID 154 Three Echelon Supply Chain Coordination under Multiplicative Demand

Rohit Gupta, Indian Institute of Management, Sambalpur, India
Bhawana Rathore, Indian Institute of Management Sambalpur, India

Master's Thesis Competition

First Place

ID 358 Implementation of Lean Manufacturing Tools to Increase Efficiency and Validate Equipment in the Production of Extrusion Hoses

Arturo Realyvásquez-Vargas, David Antonio Manjarrez-Zazueta, Guadalupe Hernández-Escobedo, Anel Torres-López and Amalia Carmina Salinas-Hernández, Department of Industrial Engineering, Tecnológico Nacional de México/Instituto Tecnológico de Tijuana, Baja California, Mexico
Adriana Salazar-Rosales, Dept. of Industrial Engineering, Tecnológico Nacional de México/Instituto Tecnológico de Tijuana, Baja California, Mexico

Second Place

ID 63 Strategic Integration of Intellectual Innovative Capital and HR Practices: Examining the Mediating Role of Knowledge Sharing Platforms in Fostering Industry Innovation in the Indian Snacks Processing and Equipment Manufacturing Sector

Meena G, Faculty of Management, SRM Institute of science and technology, Kattankulathur, Tamil Nadu, Chennai, India

Third Place

ID 29 Mental Stress and Psychological Well-Being in Working Professionals

Saswati Roy, Department of Management, Central University of Rajasthan, Bandarsindri, Ajmer, India

Lean Six Sigma Competition

First Place

ID 393 ML-Based Shelf Tracking and Low-Stock Warning System

Ruhina Quazi, Zoya Fatima Ansari, Sadaquat Jabeen, and Taj Iram Khan, Department of Electronics & Telecommunication Engineering, Anjuman College of Engineering and Technology, Nagpur, Maharashtra, India

Second Place

ID 397 Overall Equipment Effectiveness (OEE) Analysis: A Case Study of Automotive Components Manufacturing Industry

Gunderaya, Student and Qutubuddin S.M., Department of Industrial & Production Engineering, P.D.A. College of Engineering, Kalaburagi, India
Fatima Firdous, Faculty of Engineering, KBN University, Kalaburagi, India
Saniya, and Laxmi, Department of Industrial & Production Engineering, P.D.A. College of Engineering, Kalaburagi, India

Third Place

ID 104 Improving Efficiency in Manufacturing Through Lean & Six Sigma: A Case Study in VCR Systems

Parin Patel, B. Tech (Mechanical Engineering), 3rd Year, Department of Mechanical Engineering, SVNIT, Surat, India

Best Track Papers

5th IEOM India International Conference on Industrial Engineering and Operations
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Track ID	Track name	Best Track Paper ID	Paper Title
1	Artificial Intelligence and Data Science	200	Neural Network Based Pattern Recognition for Indian Sign Language Translation: Enhancing Accessibility
2	Automation, Robotics and Autonomous Systems	295	Design of Smart Device for Sewers Gas Detector and Alert System
3	Business Management and Operations Management	447	Supply Chain Digitalization and Firm Performance: Evidence from the Indian Retail Sector
4	Digital Manufacturing, Industry 4.0 and IoT	322	Development of a Smart Vaccine Supply Ecosystem Powered and Experimented by Hyper Tuned Models

5	Engineering Education and Curriculum Improvement	372	Empowering Transformative Learning Through PBL To Develop Sustainability
6	Engineering Management and Project Management	313	Application of Lean Manufacturing to Increase Productivity in an MSE in the Metalworking Sector
7	Entrepreneurship and Innovation	317	Reassessing the Role of Venture Capital Support in IPO Outcomes Using a Data-Driven Analytical Framework: Evidence from India
8	Facility Planning and Layout		
9	Human Factors, Ergonomics and Healthcare System Management	376	Ergonomic Assessment of Workstations in a Product Line of Plastic Manufacturing Industry
10	Lean Six Sigma and Operations Excellence	334	Improving Delivery Time Index in Automotive Industry through Lean Service and TPM: A Case Study
11	Manufacturing, Assembly and Design	125	Integrated improvement model with MRP, HEIJUNKA and SLP to enhance fill rate and profitability in a Peruvian Food SME
12	Quality, Reliability and Maintenance	180	An artificial Intelligence and Reliability centered maintenance based Approach for Improving Machine Effectiveness in the Manufacturing Industry
13	Simulation, Optimization and Productivity Improvement	97	Hybrid Metaheuristics for Pareto-based Bi-objective Optimization in a JIT Unrelated Parallel Machine Scheduling Problem
14	Supply Chain and Logistics	124	Data-Driven Inventory Optimization and Demand Forecasting in the Automotive Supply Chain: A Case Study from India
15	Sustainability, Green Systems and Energy	389	Circular Economy Approach for Efficient Management of Mobile Phone E-Waste: Component Extraction, Environmental Impacts and Economic Considerations
16	Case Studies and Best Practices	424	AI-Driven Transformation in Fashion Design Entrepreneurship: Opportunities and Ethical Frontiers

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