International Conference on Optimization and Data Science in Industrial Engineering (ODSIE 2025)

20 - 22 November 2025, Istanbul, Turkey, Online Event

https://odsie2025.refconf.com/

- ***The conference programs are scheduled based on Istanbul Time Zone (UTC+3).***
- ***Please check the latest version of the schedule on: https://odsie2025.refconf.com.***

First day: Thursday 20.11.2025

Location/time	9-10:30	10:45-12:15	12:15-13:30	13:30-15:00	15:15-16:45
Room 1	**Opening Ceremony** Keynote speech ***Dr. AbdulQuddus Mohammed***	10:45-11:30 Workshop ***Mr. Udaya Veeramreddygari*** 11:30-12:15 Workshop ***Mr. Harshavardhan Yedla***	Break time	Paper Session **Dr. Meenakshi Kaushik**	Panel Discussion ***Dr. Meenakshi Kaushik***
Room 2	Closed	Paper Session **Dr. Saeid Rezaei**	Break time	Paper Session **Dr. Ammar Odeh**	Paper Session **Dr. Rohit Bansal**

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20 - 22 November 2025, Istanbul, Turkey, Online Event

https://odsie2025.refconf.com/

Second day: Friday 21.11.2025

Location/time	9-10:30	10:45-12:15	12:15-13:30	13:30-15	15:15-16:45
Room 1	Paper Session **Dr. Luan-Thanh Nguyen**	10:45-11:30 Workshop ***Mr. Abhi Desai*** 11:30-12:15 Workshop ***Dr. İsmail Özcan***	Break time	Keynote speech ***Dr. Şenol Pişkin***	Paper Session **Prof. Vijay Kumar Gahlawat**
Room 2	Paper Session **Mr. Vijay Kumar Sridharan**	Paper Session **Mr. Santosh Kumar**	Break time	Paper Session **Dr. Priyadarshani Singh**	Paper Session **Dr. Prince Kumar**
Room 3	Paper Session **Dr. Mazdak Khodadadi Karimvand**	Paper Session **OP19**	Break time	Paper Session **Dr. Ali Asghar Rahmani Hosseinabadi**	Paper Session **Dr. Seyed Mohammad Javad Mirzapour Al-E-Hashem**

Third day: Saturday 22.11.2025

Location/time	9-10:30	10:45-12:15	12:15-13:30	13:30-15	15:15-16:45
Room 1	Paper Session **Dr. Mohit Malik**	Paper Session **Dr. Marwa Hasni**	Break time	Paper Session **Dr. Simerjeet Singh Bawa**	**Closing Session** Keynote speech ***Dr. Erfan Babaee Tirkolaee***
Room 2	Paper Session **Dr. Sita Ram Sharma**	Paper Session **Dr. Aybike Özyüksel Çiftçioğlu**	Break time	Paper Session **Prof. Subhash Verma**	Closed

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https://odsie2025.refconf.com/

- **Opening Ceremony**

Thursday, 20.11.2025, At 9:00 (Istanbul Local Time)

#	Title	Time	Duration (min)
1	Opening Presentation	9:00-9:05	5
2	Welcome Speech, Dr. Erfan Babaee Tirkolaee (Conference Chair)	9:05-9:15	10
3	Conference Report, Prof. A. Mirzazadeh (Conference Chair)	9:15-9:30	15
4	Keynote Speech, Dr. AbdulQuddus Mohammed (Higher Colleges of Technology, UAE)	9:30-10:15	45
5	ODSIE 2025 Clip	10:15-10:20	5
6	Istinye University Clip	10:20-10:25	5
7	Introduction to the Conference Programs and Schedules	10:25-10:30	5

- **Closing Session**

Saturday, 22.11.2025, At 15:15 (Istanbul Local Time)

#	Title	Time	Duration (min)
1	Closing Presentation	15:15-15:20	5
2	Keynote Speech, Dr. Erfan Babaee Tirkolaee (Istinye University, Turkey)	15:20-16:20	60
3	ODSIE 2025 Clip	16:20-16:25	5
4	Appreciation and Group Photo	16:25-16:45	20

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International Conference on Optimization and Data Science in Industrial Engineering (ODSIE 2025)

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İSTİNYE ÜNİVERSİTESİ İSTANBUL

Date: **Thursday, 20.11.2025** Time:**9:30-10:15**	**Keynote Speech**	**Room 1**: https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Yasin Bonyadi & Yasna Yeganeh

Title:

"The Future of Work with AI: Building Human–AI Collaboration Skills"

Keynote Speaker:
Dr. AbdulQuddus Mohammed, Assistant Professor in Business, Higher Colleges of Technology, UAE

Abstract:

By 2030, the future of work will be defined not by static job titles but by adaptable skills that enable people to collaborate effectively with AI based agentic intelligent systems. The World Economic Forum (2025) projects that 60% of core skills required for the job market will change by 2030, with this global labor market experiencing both disruption and opportunity: 92 million jobs displaced and 170 million created, a net gain of 78 million roles, which no one knows. Yet the scale of change is daunting: 59% of workers will require retraining within just five years. Industry is already responding—78% of firms report AI adoption in at least one business function (McKinsey, 2025), and PwC (2025) finds that skill requirements in AI-exposed jobs are evolving 66% faster than in non-exposed roles.

Emerging skill demands cluster in three domains. Technical skills such as AI, big data, cybersecurity, and digital literacy are accelerating in demand. Human skills—critical thinking, adaptability, resilience, and creativity—remain enduring and essential. At the same time, ethical competencies—governance, fairness, inclusion, and human agency—are gaining prominence as AI reshapes decision-making and work processes.

For higher education, the implications are profound. Research suggests that up to 60% of curricula risk misalignment with labor market needs, while static degree models cannot keep pace with rapid change. Faculty themselves require retraining to integrate AI into pedagogy and assessment. To remain relevant, universities must shift from degree-centric models to skills-first, adaptive learning ecosystems. This includes modular, stackable micro-credentials; AI-integrated, work-based projects; and continuous learning platforms supported by AI tutors and simulators. Equally urgent are embedding AI ethics and AI governance training (UNESCO, 2025), fostering academia–industry partnerships for skills forecasting and internships, and investing in faculty development and institutional AI governance.

This keynote will provide a blueprint for universities to transition into dynamic ecosystems of lifelong learning, equipping graduates not only with technical fluency but also with the capacity to collaborate with AI responsibly, creatively, and inclusively.

International Conference on Optimization and Data Science in Industrial Engineering (ODSIE 2025)

20 - 22 November 2025, Istanbul, Turkey, Online Event

https://odsie2025.refconf.com/

Date**: Thursday, 20.11.2025** Time:**10:45-11:30**	**Workshop**	**Room 1**: https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Yasin Bonyadi & Yasna Yeganeh
Title: ***"Smart Dev Assistant: AI Agent Mode in VS Code"***		
Keynote Speaker: **Mr. Udaya Veeramreddygari** Lead Software Engineer, USA & IEEE member USA		

Abstract:

works independently to support developers as they write, debug, and refactor code in real-time. By using natural language prompts, the agent can understand tasks, offer suggestions for improvements, and even take actions directly within the code editor. This creates a smooth, context-aware development experience that's perfect for enhancing productivity, minimizing context-switching, and optimizing workflow

Date**: Thursday, 20.11.2025** Time:**11:30-12:15**	**Workshop**	**Room 1**: https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Yasin Bonyadi & Yasna Yeganeh

Title:

"AI Across Industries: Driving Innovation, Efficiency, and Sustainable Growth -Transforming Manufacturing, Agriculture, Real Estate, Governance, Cybersecurity, and Entertainment"

Speakers:
Mr. Harshavardhan Yedla
Principal Architect Practitioner Data, AI & Digital Products, Wipro LLC, USA
Mr. Venkat Sharma Gaddala
Software Engineer, Google, USA

Abstract:

manufacturing, AI powers predictive maintenance and autonomous operations, boosting productivity and reducing downtime. Digital agriculture enables smarter crop management and resource use, promoting sustainable practices. Real estate leverages AI for accurate property valuation and smart building systems, improving energy efficiency and tenant experiences. Governments and public sectors use AI for predictive modeling and policy simulation, supporting better governance. In cybersecurity, AI strengthens encryption, threat detection, and authentication systems. Meanwhile, in media and entertainment, it drives content creation, personalized streaming, and immersive virtual experiences. Across sectors, AI delivers measurable ROI, advances sustainability, and empowers more informed decisions.

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https://odsie2025.refconf.com/

Date: **Thursday, 20.11.2025** Time:**10:45-12:15**	Session Code: **OP12**	**Room 2:** https://teams.microsoft.com/meet/37338956605998?p=dhPKIkcR8AR6TWSX2T Hosts: Mehrshad Jamshidipour & Zahra Norouzi Shad

Title:

"New Approaches to Achieving Sustainable Development Goals (SDGs)"

Panel Chair:

Dr. Saeid Rezaei, Arak University, Iran

Paper Code	Authors	Paper Title
1095-ODSIE2025	Saeid Rezaei	Smart Circular Economy: A Resilient Optimization Approach within the Framework of Sustainable Development Goals
1108-ODSIE2025	Maryna Gorobei; Oleksandr Bondar	Digitalisation for smart and climate-neutral cities: the case of Ukraine
1019-ODSIE2025	Md Salah Uddin; Kazi Jahid Hasan; Arif Ahmed; Abdullah Jafree; Md Alik Akandh	Addressing Technical Challenges and Workflow Optimization in 3D Prototype Manufacturing with Creality Ender 3 V2 Neo
1145-ODSIE2025	Duygu Nur Arslan; Senar Nur Yoğurtcu; Syed Shah Sultan Mohiuddin Qadri; Kıvılcım Naz Böke	Aircraft Assignment under Demand Uncertainty: A Stochastic MILP Optimization Model for Private Jet Operators
1186-ODSIE2025	Mehmet Kiziltaş	An Analysis of Metropolization Via Clustering in Arabic Peninsula for Transportation Efficiency

Date**: Thursday, 20.11.2025** Time:**13:30-15:00**	Session Code: **OP01**	**Room 1:** https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Yasin Bonyadi & Yasna Yeganeh
Title: ***"Technology Integration & Digital Transformation: Smart Operations and Process optimization"***		
Panel Chair: **Dr. Meenakshi Kaushik,** Academician (18 Years), Author of 3 Edited Books, India		

Paper Code	Authors	Paper Title
1043-ODSIE2025	Meenakshi kaushik; Paras Mahajan; Md Sakif Uddin Khan; Nishu Bansal	Interpretable Deep learning for Early Diagnosis in Low-Resource Healthcare Settings
1045-ODSIE2025	Mehmet Kiziltaş	An Analysis of Metropolization and High Capacity National Network Via Clustering in Argentina
1065-ODSIE2025	Haider Abdulkareem Alobaidi; Zahraa Ghazi Sadiq; Rafid Ali Laftah Hamad; Hameed Salim Alkabi; Waleed Nassar; Dmytro Kocherev	Defamation in the Age of Social Media: Legal Responses to Digital Reputation Crises
1101-ODSIE2025	ZhiAng Yu; Rexford Nii Ayitey Sosu	Quantitative Modelling of AI-Driven Consumer Behaviour in Digital Economies
1020-ODSIE2025	Md Salah Uddin; Abu Shahed Shah Md Nazmul Arefin; Kazi Jahid Hasan; Abu kausar; Nushrat Jahan Bristi; Mohidul Islam; Mohidul Islam	Cloud-Based Multi-Langual License Plate Recognition Using YOLO and OCR
1195-ODSIE2025	Khouloud Elloumi; Walid Chebbi	Digitization of an assembly station integrated into a learning 4.0 production line

International Conference on Optimization and Data Science in Industrial Engineering (ODSIE 2025)

20 - 22 November 2025, Istanbul, Turkey, Online Event

https://odsie2025.refconf.com/

Date**: Thursday, 20.11.2025** Time:**13:30-15:00**	Session Code: **OP02**	**Room 2:** https://teams.microsoft.com/meet/37338956605998?p=dhPKIkcR8AR6TWSX2T Hosts: Mehrshad Jamshidipour & Zahra Norouzi Shad
Title: ***"The Role of Machine Learning in Predictive Cybersecurity for Industrial Systems"***		
Panel Chair: **Dr. Ammar Odeh,** Princess Sumaya University for Technology, Jordan		

Paper Code	Authors	Paper Title
1002-ODSIE2025	Ammar Odeh; Selvakumar Manickam; Nabeel Alassaf; Mohammed Anbar	Security and Privacy Challenges in Wireless Sensor Network Communications for the Internet of Things
1034-ODSIE2025	Subhash Verma; Kirti Kirti; Shubneet .; Anushka Raj; Charu Sood; Navjot Singh Talwandi	Quantum-Enhanced Federated Learning: Pushing the Boundaries of Privacy and Speed in Distributed AI
1120-ODSIE2025	Kumar Rahul; Shraddha Verma; Charu Sood; Anushka Raj Yadav; Shubneet; and Subhash Kumar Verma	A Privacy-Preserving and Explainable Machine Learning Model for Student Performance Prediction in Virtual Environments
1125-ODSIE2025	Jiaqi Han	Analysing the Strategic Impact of Artificial Intelligence-Generated Content (AIGC) Using Machine Learning Models: Value Realisation in Corporate Management
1063-ODSIE2025	Abdulqadous Abdullah; Suzan Mohammed Jawad Alkazraji; Ayah Ahmed Jasim; Aseel Ibraheem Muhsin; Faris Abdul Kareem Khazal; Radomyr Mykolenko	Sovereignty in the Digital Age: Social, Legal, and Governance Challenges of Global Networks

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Date**: Thursday, 20.11.2025** Time:**15:15-16:45**	**Panel Discussion**	**Room 1**: https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Yasin Bonyadi & Yasna Yeganeh
Title: ***"Transforming Education in the AI Era: Opportunities, Challenges, and Pedagogical Evolution"***		
Speaker: **Dr. Meenakshi Kaushik** Academician (18 Years), Author of 3 Edited Books, India		

Theme Overview

The integration of Artificial Intelligence in education represents a pivotal moment in pedagogical history, challenging traditional teaching methodologies while offering unprecedented opportunities for personalized learning. This panel discussion explores the multifaceted implications of AI adoption in educational institutions, examining both its transformative potential and critical considerations for stakeholders across the academic spectrum.

As a Moderator I shall be coming up with 3 to 4 rounds of questions based on below topics.

Key Discussion Areas: Pedagogical Transformation and AI; Ethical Considerations and Academic Integrity; Institutional Readiness and Implementation; Student Development in the AI Age; Future Directions and Innovation

Target Outcomes: Develop framework for responsible AI integration in educational settings; Identify best practices for balancing traditional and AI-enhanced learning; Create guidelines for maintaining academic integrity; Establish roadmap for institutional AI adoption; Define metrics for measuring success of AI integration

Panel Format: Moderated discussion of key themes; Interactive Q&A session with audience; Collaborative development of actionable recommendations; Closing synthesis of key insights and future directions

Suggested Participants: Educational Technology Experts; Curriculum Development Specialists; AI Ethics Researchers; Educational Psychologists; School Administrators; Teaching Faculty; Educational Policy Makers; Student Representatives

This theme framework provides a structured foundation for a meaningful discussion while remaining flexible enough to accommodate various institutional contexts and perspectives.

Panel experts: 3 to 5 professors and Deans from reputed central universities / industry people

Date: **Thursday, 20.11.2025** Time:**15:15-16:45**	Session Code: **OP03**	**Room 2:** https://teams.microsoft.com/meet/37338956605998?p=dhPKIkcR8AR6TWSX2T Hosts: Mehrshad Jamshidipour & Zahra Norouzi Shad

Title:

"Industry 6.0, Emerging Technologies and Sustainable Development"

Panel Chairs:
Dr. Rohit Bansal, Adjunct Faculty, Rockford College, Sydney, Australia
Dr. Fazla Rabby, Director, Stanford Institute of Management & Technology, Australia
Dr. Ridhima Sharma, Associate Professor, Vivekananda Institute of Professional Studies- TC, New Delhi, India
Dr. Arti Gupta, Assistant Professor, J.C. Bose University of Science and Technology, YMCA, Faridabad, India

Paper Code	Authors	Paper Title
1028-ODSIE2025	Maria Seraphina Astriani; Alysha Puti Maulidina; Kimberly Mazel; Wahyu Sardjono; Lee Huey Yi	GeneArcana: Solution for Investigating Measles Susceptibility Candidate Genes on a Global Scale by Integrating Genomic Databases
1099-ODSIE2025	Maryna Gorobei; Oleksandr Bondar	Optimisation framework for environmental risk assessment of blockchain technologies
1131-ODSIE2025	Mehmet Kiziltaş	An Analysis of Metropolization Via Clustering in Venezuela and Its Periphery for Transportation Efficiency
1119-ODSIE2025	Manisha Nagpal; Rani Priyambada Singh; Shubneet; Anushka Raj Yadav; Parveen Siwach; Navjot Singh Talwandi	AI-Driven Threat Intelligence for Predictive Cyber Defense in Smart Cities
1140-ODSIE2025	Deniz Şeref; Beyza Aksoku; Kıvılcım Naz Böke; Syed Shah Sultan Mohiuddin Qadri	A MILP-Based Framework for Sustainable and Service-Aware Dairy Vehicle Routing under Cold Chain Constraints

International Conference on Optimization and Data Science in Industrial Engineering (ODSIE 2025)

20 - 22 November 2025, Istanbul, Turkey, Online Event

https://odsie2025.refconf.com/

Date: **Friday, 21.11.2025** Time:**9:00-10:30**	Session Code: **OP16**	**Room 1:** https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Arshia Sahraeei & Yasna Yeganeh
Title: ***"Emerging Trends in Science, Business and Technology Innovation"***		
Panel Chairs: **Dr. Luan-Thanh Nguyen,** Ho Chi Minh City University of Foreign Languages-Information Technology (HUFLIT) **Dr. Tri-Quan Dang, Senior researcher,** Ho Chi Minh City University of Foreign Languages-Information Technology (HUFLIT) **Dr. Huynh Bao Thach, Senior researcher,** Ho Chi Minh City University of Foreign Languages-Information Technology (HUFLIT) **Dr. Son-Hoang Dang, Senior researcher,** Ho Chi Minh City University of Foreign Languages-Information Technology (HUFLIT)		

Paper Code	Authors	Paper Title
1132-ODSIE2025	Yuxia Sun	Leveraging Artificial Intelligence for Enhancing Data Security in Contemporary Communication Networks Through Advanced Encryption Methods
1017-ODSIE2025	İrem Aytan; Eyüp Ensar Isık	Modeling and Optimization of Campaign-Based Staffing Needs in Call Center Operations
1046-ODSIE2025	Rajesh Ranjan; Rashmi Singh; Saumya Tripathi	Role of Information Technology in Advancing Sustainability in India: A Case Study Analysis
1098-ODSIE2025	Nurşah Yilmaz Erdeş; İsmail Karaoğlan	A Heuristic Method for The Generalized One-to-One Pickup and Delivery Vehicle Routing Problem
1182-ODSIE2025	Bahriye Cesaret	Dynamic Omni-Channel Fulfillment with Switching Customers

Date**: Friday, 21.11.2025** Time:**9:00-10:30**	Session Code: **OP04**	**Room 2:** https://teams.microsoft.com/meet/37338956605998?p=dhPKIkcR8AR6TWSX2T Hosts: Mobina Mostajabi & Yasin Bonyadi
Title: ***"AI-Driven Autonomy:Revolutionizing Customer Self-Service with Intelligent, Real-Time Assistance and Predictive Guidance"***		
Panel Chair: **Mr. Vijay Kumar Sridharan,** Vice President- Goldman Sachs- AI/ML Engineering, USA		

Paper Code	Authors	Paper Title
1047-ODSIE2025	Khem Chand; Prince Kumar; Laxmi Dhaniya; Sushila; Suman Yadav; M P Singh	Scientific Landscape of Telemedicine and Digital Healthcare: A Bibliometric Approach to Research Dynamics (2012-2025)
1056-ODSIE2025	Yahya Majeed Alsaad; Faiza Abdulla Ali; Baydaa Essam Abdulrahman Jasim; Aqeel Mahmood Jawad; Ali Alsaray; and Viktoriia Trofymchuk	AI-Driven Managerial Strategy and Institutional Readiness: Social Science Insights into Data-Centric Transformation
1018-ODSIE2025	Md Salah Uddin; Kazi Jahid Hasan; Abhijit Roy Abhi	A Comparative Study of AI-Generated 3D Models and Conventional Software-Based 3D Modeling Techniques: Accuracy, Efficiency, and Creative Potential
1078-ODSIE2025	Abdulqadous Abdullah; Hayder Mohammed Hassan; Ibrahim Khalil Ibrahim; Nameer Hashim Qasim; Hasan Ali Abbas; Ievgenii Gorbatyuk	Cognitive Automation and Consumer Experience: Socio-Legal Dimensions in Textile Retail Innovation
1093-ODSIE2025	Muzaffer Yassen; Marwan Salah Noaman; Taghreed Alaa Mohammed Ali Hassan; Nameer Hashim Qasim; Hamza Aljebouri; Ihor Averichev	Digital Influence and Strategic Communication in the Global Information Order: The Role of Social Media Marketing Ecosystems

Date**: Friday, 21.11.2025** Time:**9:00-10:30**	Session Code: **OP18**	**Room 3:** https://teams.microsoft.com/meet/36378593045888?p=Qma1WeOsxrMWsNeLPg Hosts: Mehrshad Jamshidipour & Zahra Norouzi Shad
Title: ***"Computational Intelligence and Decision Optimization for Reliability and Maintenance Systems"***		
Panel Chair: **Dr. Mazdak Khodadadi Karimvand,** University of Science and Culture, Iran		

Paper Code	Authors	Paper Title
1143-ODSIE2025	Mustafa Berke; Ahmet Kabarcık; Syed Shah Sultan Mohiuddin Qadri	Enhancing Delivery Reliability Through Simulation-Based Production Time Estimation
1176-ODSIE2025	Demet Özgür Ünlüakın; Şimal Ekin Çağlar	Integrating HAZOP and Dynamic Bayesian Networks for Maintenance Optimization of Complex Systems
1187-ODSIE2025	Hossein Mokhtari; Kourosh Eshghi	Applications of Machine Learning Models in Multi-Criteria Decision-Making with Pairwise Comparisons
1189-ODSIE2025	Demet Özgür Ünlüakın	Probabilistic and Decision-Theoretic Approaches for Maintenance Optimization
1016-ODSIE2025	Meriam Ayari; Sonia Nasri; Hend Bouziri; Wassila Aggoune-Mtalaa	An Insertion Reasoning Approach based on Local Search

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Date**: Friday, 21.11.2025** Time:**10:45-11:30**	**Workshop**	**Room 1**: https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Arshia Sahraeei & Yasna Yeganeh

Title:

"AI and ML Driven Customer Analytics to Operational Optimization in Retail Industry"

Speaker:
Mr. Abhi Desai
Research Scholar — AI, ML, Data Science & Analytics
Former Lead Data Analyst at Saks Fifth Avenue, NY, USA

Abstract:
This workshop demonstrates how analytics and data science can transform retail operations by connecting customer insights to operational decision-making. Participants will explore how AI and ML techniques are applied to customer segmentation, lifetime value (LTV), lifetime revenue (LTR), and customer acquisition cost (CAC), and how these insights inform labor planning, shipping optimization, and inventory management. Real-world retail examples illustrate the end-to-end workflow, highlighting measurable improvements in efficiency, accuracy, and strategic decision-making. Attendees will gain practical guidance on leveraging AI and ML to bridge customer analytics and operational optimization, enabling them to drive tangible business impact in retail and beyond.

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Date**: Friday, 21.11.2025** Time:**11:30-12:15**	**Workshop**	**Room 1**: https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Arshia Sahraeei & Yasna Yeganeh

Title:

"The k-Proportional t-Value in Big Boss Games: Bridging Game Theory, Artificial Intelligence, and Operational Research"

Speaker:
Dr. İsmail Özcan
Department of Engineering for Industrial Systems and Technologies, University of Parma, Italy

Abstract:

This workshop explores the k-proportional t-value, a fresh perspective on how collaboration and influence can be modeled in complex organizations. Building on ideas from game theory, Artificial Intelligence (AI), and Operational Research (OR), this approach helps us understand how leaders and teams share value and make balanced decisions in hierarchical settings.

Rather than focusing purely on mathematical details, the session will emphasize how the k parameter introduces flexibility in distributing payoffs and maintaining fairness among players — especially in big boss games, where one dominant actor significantly shapes the group's success.

To make the discussion more engaging, participants will form small coalitions to simulate "big boss" decision-making scenarios and observe how different k values affect cooperation outcomes. An interactive visualization will illustrate how changes in proportionality impact fairness and stability, while a real-world case inspired by Amazon's AI teams developing personalized recommendation systems will show how data-driven cooperation can be analyzed through this framework.

By blending theory with practical examples and interactive exercises, the workshop demonstrates how the k-proportional t-value can inform smarter, fairer, and more adaptive decision-making in industrial operations, logistics, and AI-based organizations. Participants will leave with both conceptual insights and an intuitive sense of how hierarchical collaboration can be optimized.

Date: **Friday, 21.11.2025** Time: **10:45-12:15**	Session Code: **OP05**	**Room 2:** https://teams.microsoft.com/meet/37338956605998?p=dhPKIkcR8AR6TWSX2T Hosts: Mobina Mostajabi & Yasin Bonyadi
Title: ***"Generative AI in Healthcare: Transforming Patient Care and Medical Innovation"***		
Panel Chair: **Mr. Santosh Kumar,** HCLTech, Technical Lead (AI/ML), USA		

Paper Code	Authors	Paper Title
1009-ODSIE2025	Parnian Rashidy; Maryam Ghorbani; Mohammad Jalal Nematbakhsh; Nader Rahnama	AI-Based Detection of Postural Anomalies for Sport Medicine and Physiotherapy: Comparative Deep Learning and Clinical Thresholding Approaches
1107-ODSIE2025	Zichun Chao and Jiahao Liu	Machine learning-based diabetes prediction model construction and analysis: a case study of the Kaggle diabetes dataset
1021-ODSIE2025	Abu Kausar; Abu Shahed Shah Md Nazmul Arefin; Mohidul Islam; Md. Salah Uddin; Kazi Jahid Ha-san; S M Monowar Kayser; Md.Shafikul Islam	Deep Transfer Learning for Rice Blast Disease Classification: A Multi-Model Comparative Study
1115-ODSIE2025	Jan Francisti; Kristián Fodor; Zoltán Balogh	Smartwatch-Based Heart Rate Tracking
1124-ODSIE2025	Jiaqi Han	ML-Driven Optimisation of Management Efficiency and Strategic Business Models in the Big Health Sector in the Digital Economy

Date: **Friday, 21.11.2025** Time: **10:45-12:15**	Session Code: **OP19**	**Room 3:** https://teams.microsoft.com/meet/36378593045888?p=Qma1WeOsxrMWsNeLPg Hosts: Mehrshad Jamshidipour & Zahra Norouzi Shad
Title: ***"Data-Driven Governance, Organizational Performance & Digital Communication"***		
Panel Chair:		

Paper Code	Authors	Paper Title
1049-ODSIE2025	Mohammed Zuhair; Khalis Kadhim; Sarah Aamer Riyadh Abdulrahman; Adhraa Odah Hussan; Abdalfattah Sharad; Kyrylo Voronezhsk	Artificial Intelligence in Criminal Justice: Examining Legal, Ethical, and Social Impacts
1052-ODSIE2025	Saif Saad Ahmed; Ibrahim Khilel Khinger; Deena Waleed Hameed; Majid Fadhil Ziboon; Akram Fadhel Mahdi; Danylo Bohatyrov	Econometric and Computational Modeling of Corporate Governance and Firm Performance in Emerging Markets
1058-ODSIE2025	Baker Mohammed KhalilNabaa Latif; Muhamad Falih Hassan Al-Kanani; Khadijah Zuweid Khalif Mukhay; Nataliia Bodnar; Baker Mohammed Khalil; Liubov Zgalat-Lozynska	Computational Assessment of Gender-Inclusive Leadership as a Strategic Asset: Implications for Corporate Governance and Financial Performance
1070-ODSIE2025	Adnan Khaleel Kadhim; Mohammed Taqi Fadhil; Jasim Hameed Naseef; Ghazwan Salim Naamo; Thamer Kadum Yousif Al; Vasyl Matskovskyi	A Data-Driven Framework for Evaluating Non-Profit Sector Performance: Integrating Multidimensional Metrics and Stakeholder Engagement
1073-ODSIE2025	Sarah Salah Hadi; Jafaar Aqeel Al-Jomaily; Shahd Nasser Saadi Hassan; Nazar Habeeb Abbas; Intesar Abbas; Oksana Zghurska	Algorithmic Authority and Contractual Sovereignty: Legal and Social Implications of AI Negotiation Systems Across Jurisdictions

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20 - 22 November 2025, Istanbul, Turkey, Online Event

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Date**: Friday, 21.11.2025** Time:**13:30-15:00**	**Keynote Speech**	**Room 1**: https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Arshia Sahraeei & Yasna Yeganeh
Title: ***"Digital Twins & XR for Translational Healthcare: From Simulation to Clinical Impact"***		
Keynote Speaker: **Dr. Şenol Pişkin** Istinye University, Türkiye		

Abstract:

Healthcare is entering an era where rich data streams, physics-based simulation, and immersive interaction converge to create patient-specific digital twins. In this keynote I will outline a practical roadmap for combining digital-twin models, XR-enabled visualization, and machine learning to accelerate diagnosis, surgical planning, and rehabilitation. I will present case studies from cardiovascular and neurorehabilitation domains that demonstrate how optimization and data-science methods (parameter estimation, model personalization, and predictive analytics) reduce uncertainty, improve intervention planning, and enable remote, clinician-in-the-loop workflows. Finally, I will discuss translational challenges — data governance, clinical validation, and integration with hospital systems — and propose opportunities where optimization and industrial engineering approaches can speed adoption and ensure robust, ethical deployment.

Date: **Friday, 21.11.2025** Time: **13:30-15:00**	Session Code: **OP13**	**Room 2:** https://teams.microsoft.com/meet/37338956605998?p=dhPKIkcR8AR6TWSX2T Hosts: Mobina Mostajabi & Yasin Bonyadi
Title: ***"Smart Cities for a Sustainable Future: Optimization and Data Science Approaches"***		
Panel Chair: **Dr. Priyadarshani Singh,** School of Business Management, Noida International University, India **Dr. Rashmi Manhas,** School of Business Management, Noida International University, India **Dr. Mona Sharma,** School of Business Management, Noida International University, India		

Paper Code	Authors	Paper Title
1038-ODSIE2025	Şule Şevval Karakaya; Vilda Purutçuoğlu; Ahmet Bursalı; Ekin Can Erkuş	Revealing Cyclic Dynamics in Electricity Consumption: A Hybrid Feature-Based Clustering Framework
1044-ODSIE2025	Mona Sharma; Priyadarshani Singh; Rashmi Manhas	Crisis-Resilient Learning and Smart Cities: An Empirical Approach to Smart Education Models for Sustainable Urban Futures
1097-ODSIE2025	Hakan Erdeş; Saadettin Erhan Kesen	A Metaheuristic Algorithm for Bi-Objective Speed and Load-Dependent Multi-Depot Electric Vehicle Routing Problem with Half-Open Rotations
1138-ODSIE2025	Engin Durmaz; Fatma Corut Ergin	Scalable Technician Dispatch with SLA Deadlines: Unified Path Extraction and Anchor-Based Partitioning
1148-ODSIE2025	Nilgün Beyza Yavuz; Aslı Ahsen Vurgun; Syed Shah Sultan Mohiuddin Qadri	Optimization of Portable Electric Vehicle Charging Station Deployment Using a Mixed-Integer Programming Approach
1196-ODSIE2025	Bahadır Alp Öner; Mutluhan Akçam; Mehmet Mert Baş; İrem Hamurcu; Muhammed Emin Altın; Sinem Özkan	Integrated Raw Material Segmentation and Periodic Review Inventory Control: A Case Study in an Electronic Manufacturing Company

Date: **Friday, 21.11.2025** Time: **13:30-15:00**	Session Code: **OP07**	**Room 3**: https://teams.microsoft.com/meet/36378593045888?p=Qma1WeOsxrMWsNeLPg Hosts: Mehrshad Jamshidipour & Zahra Norouzi Shad

Title:
"AI for Healthcare Optimization: Metaheuristics, Machine Learning, Mental Health, Ambulance Routing problem in Emergency Scenarios"

Panel Chairs:
Dr. Ali Asghar Rahmani Hosseinabadi, Department of Computer Science, University of Regina, Canada
Dr. Navid Naghsh, Department of Pharmacy, Shahid Sadoughi University of Medical Sciences, Iran
Dr. Maryam Mohebbi, Department of Psychology, Islamic Azad University Qazvin Branch, Iran
Dr. Seyedsaeid Mirkamali, Department of Computer Engineering and IT, Payame Noor University, Tehran, Iran

Paper Code	Authors	Paper Title
1006-ODSIE2025	Maryam Mardani; Sara Mardani; Ali Asghar Rahmani Hosseinabadi	Prediction of Oral Squamous Cell Carcinoma Based on Deep Learning of Breath Samples
1012-ODSIE2025	Amirhossein Amou Jafari; Abbas Foroozanfar; Ardavan Babaei; Erfan Babaee Tirkolaee	Data-Driven Assessment of Healthcare Institutions: A Combined Bayesian BWM, MAIRCA, and Boosted Deci-sion Tree Regression
1026-ODSIE2025	Ali Kalantari	The Use of X-ray Image Processing in the Diagnosis of External Defects of Tires
1027-ODSIE2025	Ali Kalantari	Review, Applications, Challenges and Research Directions in Increasing the Deployment of DNN in Current and New Cloud Computing Systems
1029-ODSIE2025	Ali Kalantari	An Efficient Model for Smart Agriculture Based on Smart Irrigation with Thermal Imaging

Date: **Friday, 21.11.2025** Time: **15:15-16:45**	Session Code: **OP10**	**Room 1:** https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Arshia Sahraeei & Yasna Yeganeh

Title:

"Industrial Transformation Through Big Data Analytics: Trends, Challenges, and Opportunities"

Panel Chair:
Prof. Vijay Kumar Gahlawat, NIFTEM-K, India
Dr. Kumar Rahul, NIFTEM-K, India
Dr. Mohit Malik, Noida International University, India

Paper Code	Authors	Paper Title
1110-ODSIE2025	Huan Liang	Big Data Analytics for Cross-Cultural Communication Patterns in Online English Learning
1116-ODSIE2025	Keyu Liu; Ratneswary Rasiah	Optimizing E-business Marketing with Big Data and AI: A Study on Precision Strategies
1166-ODSIE2025	Abhi Desai	AI-Driven Customer Analytics for End-to-End Operational Optimization in Retail and Logistics
1023-ODSIE2025	Sylwia W Szybowska; Krzysztof Chochowski; Anna Chochowska	Social Media as a Battlefield for Information Warfare
1041-ODSIE2025	Gizem Atar; Vilda Purutçuoğlu; Ekin Can Erkuş; Ahmet Bursalı	Robust Modeling of Global Temperature Anomalies (1850-2024)
1191-ODSIE2025	Ahmed Hassaan; Sakera Begum; Md Ismail Jobiullah; Muhammad Mudaber Jamshaid; Zeeshan Akbar; Sikander Niaz	AI-Driven Fraud Detection in Real-Time Financial Transactions: A Deep Learning Approach

Date: **Friday, 21.11.2025** Time: **15:15-16:45**	Session Code: **OP11**	**Room 2:** https://teams.microsoft.com/meet/37338956605998?p=dhPKIkcR8AR6TWSX2T Hosts: Mobina Mostajabi & Yasin Bonyadi
Title: ***"Data-Driven Strategies for Sustainable and Smart Business Operations"***		
Panel Chair: **Dr. Prince Kumar,** Associate Professor, School of Business Management, Noida Internasional Univeristy, India		

Paper Code	Authors	Paper Title
1014-ODSIE2025	Kamilia Bedhief, Sonia Nasri, Hend Bouziri	Greedy Insertion with Queue-based Retry and Dynamic Acceptance Control
1117-ODSIE2025	Guihong Wang	Analyzing the Role of Corporate Culture in Leadership-Driven Employee Engagement: A Big Data Perspective
1122-ODSIE2025	Junkai Wang	Comparing IP Operation Strategies in China and Japan: Data-Driven Insights from Pop Mart and Anime Models
1033-ODSIE2025	Nikita Furtsev	Electrical circuit parameter identification based on state-space model
1147-ODSIE2025	Murat Ayvaz; Taha Varol; Örsan Özener	Optimizing Logistic Decisions Through Machine Learning

Date: **Friday, 21.11.2025** Time: **15:15-16:45**	Session Code: **OP20**	**Room 3:** https://teams.microsoft.com/meet/36378593045888?p=Qma1WeOsxrMWsNeLPg Hosts: Mehrshad Jamshidipour & Zahra Norouzi Shad
Title: ***"AI-Driven Optimization and Intelligence in Modern Logistics"***		
Panel Chair: **Dr. Seyed Mohammad Javad Mirzapour Al-E-Hashem,** Amirkabir University of Technology, Iran		

Paper Code	Authors	Paper Title
1167-ODSIE2025	Gamze Kocatürk ; Cengizhan Haldız; Egemen AKIN	Automated Dimensional Measurement for Logistics Using Computer Vision and Deep Learning
1188-ODSIE2025	Gamze Kocatürk; Egemen AKIN; Tuncay Özcan; Cengizhan Haldız	Comparative Analysis of Transformer-Based Language Models for Candidate-Job Matching in Logistics Industry
1193-ODSIE2025	Luigi Di Puglia Pugliese; Francesca Guerriero; Khaoula Kharfati; Giusy Macrina; Ahmed Roubi	A decomposition approach for the travelling salesman problem with time windows and non-linear energy consumption
1173-ODSIE2025	Mehmet Kiziltaş	An Analysis of Metropolization Via Clustering in Ethiopia Centered Region for Transportation Efficiency
1190-ODSIE2025	Md Nayeem Hasan; Mahdia Amina; Md Maruful Islam; Fahim Shahrear; Israt Jahan	AI-Driven drug discovery: Accelerating the identification of Novel Therapeutics Using Artificial Intelligence

Date: **Saturday, 22.11.2025** Time: **9:00-10:30**	Session Code: **OP14**	**Room 1:** https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Mehrshad Jamshidipour & Arshia Sahraeei

Title:

"Strategic Supply Chain Analytics: Optimizing Circularity, Resilience, and Sustainability"

Panel Chairs:

Dr. Mohit Malik, School of Business Management, Noida International University, India

Dr. Dhiraj Kumar Yadav, Department of Agricultural Engineering, North Eastern Regional Institute of Science and Technology, Nirjuli, India

Dr. Parveen Siwach, Symbiosis Centre for Management Studies, Noida Campus, Symbiosis International (Deemed University), Pune, India

Paper Code	Authors	Paper Title
1144-ODSIE2025	Fatih Tiryaki; Yusuf Mert Tuna; Syed Shah Sultan Mohiuddin Qadri	A Mixed-Integer Framework for Sustainable, Service-Aware Vehicle Routing in Heterogeneous Fleets
1007-ODSIE2025	Pradipta Patra	Analysing an EOQ model with imperfect quality using absorbing state markov chain
1141-ODSIE2025	Leila Chehreghani; Mansour Youseffi; Leo Vefghi	A Data-Driven Framework for Assessing the Impact of Economic Sanctions on Supply Chain Operations: Evidence from Iran's Private Medical Equipment Sector
1155-ODSIE2025	Faustino Taderera	Managing strategic Omanisation for localization of skills in the logistics sector in Oman and dealing with challenges and headwinds
1130-ODSIE2025	Gedefaye Achamu Meretie; Eshetie Berhan; sisay A Geremew; Betsha Tizazu	Specification of Lower and Upper Limits of Crop Yield using Evapotranspiration Production Function and Crop Yield Index (SLULCY-ETPFCYI)

Date: **Saturday, 22.11.2025** Time: **9:00-10:30**	Session Code: **OP17**	**Room 2:** https://teams.microsoft.com/meet/37338956605998?p=dhPKIkcR8AR6TWSX2T Hosts: Mobina Mostajabi & Yasin Bonyadi
Title: ***"Mathematics, Computation and Complex Systems"***		
Panel Chair: **Dr. Sita Ram Sharma,** Chitkara University, India		

Paper Code	Authors	Paper Title
1003-ODSIE2025	Mohammed Hadi Lafta and Eman Samir Bhaya	Exponential Approximation for L_p (D),p>0
1096-ODSIE2025	mehmet kaygusuz; Vilda Purutçuoğlu	Detection of Outliers via Extended Form of Conformal Robust Neural Network with Stochastic differential equations
1100-ODSIE2025	mehmet kaygusuz; Vilda Purutçuoğlu	E-Values Multiple Testing for Conformal Prediction on Biological Networks
1105-ODSIE2025	Zhongyuan Pang; Qitong Luan; Yangyu Gao	Digital Twin-Driven Energy Management for Hybrid Renewable Microgrids
1112-ODSIE2025	Sherzod Ibodulloev; Pavel Sergeevich Grigorev; Bespalco Sergey	A study for assessing the potential breakdown of a boiler tank transporting dangerous goods during an emergency impact.

Date: **Saturday, 22.11.2025** Time: **10:45-12:15**	Session Code: **OP15**	**Room 1:** https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Mehrshad Jamshidipour & Arshia Sahraeei
Title: ***"Forecasting Techniques for Operations Research"***		
Panel Chair: **Dr. Marwa Hasni,** LR-OASIS, National Engineering School of Tunis, University of Tunis El Manar, Tunisia		

Paper Code	Authors	Paper Title
1104-ODSIE2025	Junying Wu	Labor market demand and supply forecasting model under the background of big data
1111-ODSIE2025	Xiaodong Cao; Yong Yu; Xixia Qiu; Zehao Guo	Design and Optimization of a Panoramic Real-time Monitoring System for Integrated Intelligent Power Supply and Distribution in Data Center Rooms
1127-ODSIE2025	Jiankun Zhang	Digital Ecosystems for Intangible Cultural Heritage: Virtual Simulation and Social Media Strategies in Vocational Education Dissemination
1135-ODSIE2025	Harshavardhan Yedla; Lakshmana Rao Koppada; Ramsekhar Bodala; Ajay Babu Nellipudi; Vandana Kollati	AI-Driven Quantum Approaches to Water Purification and Pollution Control for SDG 6
1151-ODSIE2025	Mehmet Kiziltaş	An Analysis of Metropolization and High Capacity Transportation of Brazil Via Clustering Methods

Date: **Saturday, 22.11.2025** Time: **10:45-12:15**	Session Code: **OP08**	**Room 2:** https://teams.microsoft.com/meet/37338956605998?p=dhPKIkcR8AR6TWSX2T Hosts: Mobina Mostajabi & Yasin Bonyadi

Title:

"Artificial Intelligence Solutions for Engineering Problems"

Panel Chairs:

Dr. Aybike Özyüksel Çiftçioğlu, Department of Civil Engineering, Manisa Celal Bayar University, Türkiye

Dr. Soheyl Khalilpourazari, Department of Mechanical, Industrial and Aerospace Engineering, Concordia University, Montreal, Canada

Paper Code	Authors	Paper Title
1037-ODSIE2025	Tuba Irmak	Machine Learning-Based Multi-Class Classification of Physiological Signals from WESAD Dataset for Stress and Affective State Detection
1103-ODSIE2025	YIJU LI	AI-Driven Intelligent Operation and Maintenance and Fault Prediction for Data Center Networks
1139-ODSIE2025	Aybike Özyüksel Çiftçioğlu	Data-Driven Assessment of Bond Strength in Reinforced Concrete Under Corrosion Effects
1164-ODSIE2025	Narges Moghaddasi	A Hybrid GA–RF Approach to Cloud-Based Scheduling in Smart Factories: A Techno-Managerial Perspective
1035-ODSIE2025	Shubneet .; Anushka Raj; Navjot Singh Talwandi; Rehana Perveen; Aarti Hans; Rakesh Thakur	Explainable Reinforcement Learning in Autonomous Navigation Systems
1184-ODSIE2025	Sakine Sinem Aykut Yücel; Selda Altıntop; Nurgül Atabay; Abdullah İncir; Filiz Vargün; Fatih Özer	Deprem Enkaz Atıklarının Sınıflandırılması, Yönetimi Ve Geri Dönüşüm Potansiyeli

Date: **Saturday, 22.11.2025** Time: **13:30-15:00**	Session Code: **OP06**	**Room 1:** https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Mehrshad Jamshidipour & Arshia Sahraeei
Title: ***"E-Government, E-Commerce, and E-Learning"***		
Panel Chair: **Dr. Simerjeet Singh Bawa,** Chitkara University, India		

Paper Code	Authors	Paper Title
1106-ODSIE2025	Chao Li	Introducing Adaptive Student Evaluation and Feedback Systems for English Language Learning
1113-ODSIE2025	Qiaonan Lin	Incorporating Adaptive Feedback and Dynamic User Profiles into Personalized Learning Resource Recommendations with Large Models
1123-ODSIE2025	Jun Duan	Enhancing College English Translation Teaching with AI-Assisted Error Detection and Correction Tools
1126-ODSIE2025	Tingting Wei; Nan Zhou; Wen Yu	Exploring the Impact of ChatGPT on EFL Learners' Lab Report Writing: A Comparative Study
1129-ODSIE2025	Ying Bao; Hashimah Mohd Yunus	AI-Powered Personalized Blended Learning Based on Learning Styles and the Community of Inquiry Framework

Date: **Saturday, 22.11.2025** Time: **13:30-15:00**	Session Code: **OP09**	**Room 2:** https://teams.microsoft.com/meet/37338956605998?p=dhPKIkcR8AR6TWSX2T Hosts: Mobina Mostajabi & Yasin Bonyadi

Title:

"Optimization and Strategic Decision-Making in Industrial Management"

Panel Chairs:
Prof. Subhash Verma, School of Business Management, Noida International University, India
Dr. Pooja Goel, School of Business Management Noida International University, India
Mr. Naveen Nanda, Procurement & Supplier Management, Havells, India

Paper Code	Authors	Paper Title
1040-ODSIE2025	Mahnaz Maghbouli; Azam Pourhabib Yekta	Measuring Environmental Efficiency considering output Interdependency: A SBM-DEA Approach
1102-ODSIE2025	Wei Yang; HongBing Hu; Ke Jiang; XiaoYang Yu; ChengZhe Hu	Inventory Optimization Control Method for Power Materials Supply Chain Driven by Digital Twin Technology
1121-ODSIE2025	Wiem Daoud-BenAmor; Hela Moalla Frikha; Luis Martínez López	A Fuzzy Multi-Criteria WASPAS-H Approach to Agricultural Water Resource Management
1174-ODSIE2025	Melike Cari; Ertugrul Ayyildiz	Evaluating Sustainable Design Factors for Co Working Spaces with the Best Worst Method
1175-ODSIE2025	Betul Kara; Ceyda Bak; Ertugrul Ayyildiz	Systematic Ranking of MARPOL Risks using FMEA with Picture Fuzzy Numbers

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Date: **Saturday, 22.11.2025** Time:**15:20-16:20**	**Keynote Speech**	**Room 1**: https://teams.microsoft.com/meet/3554736770092?p=VZ0RrDKIK7EaMQjQn5 Hosts: Mehrshad Jamshidipour & Arshia Sahraeei
Title: ***"Towards Waste Management 5.0"***		
Keynote Speaker: **Dr. Erfan Babaee Tirkolaee,** Istinye University, Turkey		

Abstract:
Efficient Waste Management (WM) is vital for environmental protection, public health, and resource conservation, especially as global waste generation is projected to reach 2.59 billion tons by 2030 and 3.4 billion tons by 2050. A well-designed Waste Management System (WMS) ensures the systematic collection, transportation, processing, and treatment of waste while minimizing ecological and human impacts. Rapid industrial and social growth has intensified resource consumption and amplified waste generation, prompting the need for comprehensive optimization approaches that reduce waste, maximize recycling and reuse, and ensure safe disposal. Recent advancements in digitalization and Artificial Intelligence have transformed industries under the Industry 4.0 (I4.0) paradigm; however, its limitations regarding social fairness, environmental protection, and resilience have accelerated the emergence of Industry 5.0 (I5.0). Integrating human-centricity, sustainability, and resilience, I5.0 offers promising opportunities for next-generation WMSs. Moreover, its strong synergy with Circular Economy (CE) principles (i.e., refuse, reduce, reuse, repurpose, and recycle) enables smarter, greener, and more adaptable solutions. Leveraging AI, IoT, and robotics, WM5.0 fosters efficient resource utilization, encourages end-of-life-focused product design, and enhances sustainable waste practices across the entire lifecycle.