Low-cost Digital Solutions for Industrial Automation

Paper presentation Schedule | Monday 25 September

Lecture Theatre 2

Start Time	Finish Time	Paper Title	Author
11:30	11:50	Low-Cost Vibration Sensor with Low Frequency Resonance for Condition Monitoring of Low Speed Bearings: A feasibility study	Agusmian Ompusunggu
11:50	12:10	Low-cost visual corrosion inspection: an industrial case study	Karina Hernandez
12:10	12:30	A systematic method for retrofitting legacy machines using the "Shoestring" philosophy	Jan Polzer
14:10	14:30	Methodology for On-Machine Calibration of Low-Cost Wireless Sensors	Kyle Saleeby
14:30	14:50	Evaluation of No-Cost MTConnect-Enabled Machine Monitoring Architecture via Google Sheets	Matthew Kosmala
14:50	15:10	Industry 4.0 Compliant Asset Administration Shell Service collector using Single-Board Computers	Martín Bär
15:30	15:50	Enhancing Digital Manufacturing with Affordable Vision Systems: Exploring Low-Cost Applications	Zhengyang Ling
15:50	16:10	Towards a comparison of low-cost technologies for monitoring power consumption	German Terrazas
16:10	16:30	Cost-Effective Decision Optimisation in SMEs: An Approach Using Neo4j Graph Database and AI-Supported Vision Systems	Fan Mo

Lecture Theatre 1

Start Time	Finish Time	Paper Title	Author
11:30	11:50	Digital-Twin based data modelling for Digital Building Logbook implementation	Martina Signorini
11:50	12:10	Lightweight Digital Twin as a Service (LDTaaS): a low-cost digital transformation solution for manufacturing SMEs	Daqiang Guo
12:10	12:30	Virtual sensor architecture for indoor air quality monitoring	Jorge Merino
14:10	14:30	Maintenance on a Shoestring: The low-cost journey from zero to predictive maintenance	Pedro Rivera Torres
14:30	14:50	Low-Cost construction of Digital Twins Using Administration Asset Shell in Augmented Reality guide service for Machine tool operators	Jumyung Um
14:50	15:10	Innovative VS. traditional: A framework to assess the sustainable trade-off of maintenance strategies	Alice Paola Pomè

Paper presentation Schedule | Tuesday 26 September

Lecture Theatre 2

Start Time	Finish Time	Paper Title	Author
09:30	09:50	Low-cost Digitalization opportunities in healthcare: The Histopathology Department Case-study	Nicola Moretti
09:50	10:10	How much do choices impact environmentally the maintenance activities? A measurement framework based on Ecological Footprint	Alice Paola Pomè
10:10	10:30	Empowering the food industry through IIoT platforms: Takeaways for IT/OT integration in Industry 4.0	Soujanya Mantravadi
11:20	11:40	Semantic engineering towards low-cost elasticity	Nikolai Kazantsev
11:40	12:00	Unlocking the Potential of Data in Circular Manufacturing: Vision, Challenges, and Opportunities	Tasnim A Abdel-Aty
12:00	12:20	Methodology for Digital Transformation: A Continuous Improvement Approach	Karina Hernandez
13:50	14:10	Digital Transformation of a Manufacturing SME - Capability Building Perspective	Gurkan Inan
14:10	14:30	Cost-Effective Digital Transformation of SMEs through Low-cost Digital Solutions	Gokcen Yilmaz

Lecture Theatre 1

Start Time	Finish Time	Paper Title	Author
09:30	09:50	Explainable AI-powered Edge Computing Solution for Smart Building Energy Management in Green IoT	Ibrahim Kök
09:50	10:10	Embedded AI System of Low-Cost Sensor for Robotic Gripper in the Box Handling Process	Jongsu Park
10:10	10:30	Analytics on a Shoestring: Evolving the Requirements	Anand Mukherjee
11:20	11:40	Intelligent Low Cost IoT services for Smart Digital Manufacturing	Chen Chen
11:40	12:00	Low-cost Very Narrow Aisle Pallet Racking Vehicle Utilisation Monitoring System	Jaime Macias