



# EAI MMS 2024 - 9th EAI International Conference on Management of Manufacturing Systems

*October 9-11, 2024  
Dubrovnik, Croatia*

## Conference Program

The participants of EAI MMS 2024 are welcome to join the interesting scientific presentations provided by our co-located conference [EAI ICDF2C 2024](#)

### Wednesday, 9th of October 2024

**15:00 -16:00** Registration

**16:00-17:00** Opening Ceremony (incl. dinner)

Welcome Speech

- **Prof. Dragan Peraković**  
University of Zagreb, Faculty of Transport and Traffic Science, Croatia
- **Assoc. Prof. Lucia Knapčíková**  
Technical University of Košice, Faculty of Manufacturing Technologies, Slovak Republic

**17:15** Departure to Social Program - Cruise around Dubrovnik (together with co-located conference [EAI ICDF2C 2024](#))

### Thursday, 10th of October 2024

**09:00-10:15 Keynote Talks**

**Prof. Srdjan Capkun**, ETH Zurich, Switzerland

**Prof. Enes Sukić**, University Union- Nikola Tesla, Belgrade, Serbia

**10:15-10:45 Industry presentations**

Ventura Enterprise Risk Management, Brazil

DCSO Deutsche Cyber-Sicherheitsorganisation GmbH, Germany

INsig2, Croatia

**10:45-11:00 Coffee Break**

**11:00-16:00 Plenary session/Oral Presentations**

**11:00-11:15 André Ribeiro, André S. Santos, Leonilde R. Varela Olena Hrybiuk, Miguel Bastos Gomes and José Machado-** Artificial Intelligence in the Lot-Sizing Problem: An Overview and Future Paths

**11:20-11:35 Markus Brillinger, Florian Lackner, Muaaz Abdul Hadi, Konrad Diwold, Amer Kajmakovic et al. -** Achieving economic sustainability via low-cost automation techniques - a novel study

**11:40-11:55 Natalya Shramenko, Christoph Hupfer, Vladyslav Shramenko, and Piotr Trojanowski-** Electric Cargo Bikes in Urban Logistics: Scenarios and Their Contribution to Sustainable Mobility

**12:00-12:15 Rebeka Tauberová, Lucia Knapčíková, Dorota Czarnecka-Komorowska, Waldemar Matysiak, Jakub Hajkowski, Jerzy Winczek, Daniel Strametz -**Application of recycled materials into sustainable manufacturing in the context of Industry 5.0

**12:30-14:00 Lunch**

**14:00-14:15 Dalibor Šeljmeši, Vladimir Brtka, Gordana Jotanović, Goran Jauševac, Eleonora Brtka, and Dragan Peraković-** Enhanced Inception-Aided MobileNet: Optimizing Deep Learning Performance on Resource-Constrained Devices

**14:20- 14:35 Samer Al-Rabeei, Peter Korba, Volodymyr Tymofiiv, Michal Hovanec, Martin Vencel'-** Using additive manufacturing in the supply chain management of the aerospace industry

**14:40-14:55 Marko Periša, Petra Teskera, Ivan Cvitić, Markus Brillinger-** Conceptual Framework for Designing Assistive Technologies in the User's Working Environment

**15:00-15:15 Marek Ondov, Andrea Rosová, Marian Šofranko and Patrícia Muchová-**Case study: Simulation approach to improve the efficiency of warehousing processes

**15:30-15:45 Coffee Break**

**15:45-16:30 Poster Session**

**Posters presentation /5 min per poster**

**Jana Smetanková, Mária Grazianová, Rastislav Ručinský, Peter Mésároš-** Theoretical framework, development and impact of technological advances on Life Cycle Costing of buildings

**Michal Beno and Dagmar Caganova-** Smart Home Settings: qualitative evaluation by Smart Home Officers

**Jozef Husár, Stella Hrehová, Jakub Kaščák, Justyna Trojanowska, Katarzyna Antosz-**Industry 5.0 Based Virtual Enterprise Concept in a PLM Software Environment with IIoT Implementation for Energy Consumption Monitoring

**Annamária Behúnová, Tomáš Mandičák and Marcel Behún-** The Potential Use of Artificial Intelligence in Building Information Modeling within Industry 4.0

**Mária Grazianová, Jana Smetanková, Rastislav Ručinský, Peter Mésároš** - Economic benefits of retrofitting historic buildings: a review from the perspective of LCA, LCC and Cost Optimal

**Ivan Cvitić, Dragan Peraković , Mijo Šarčević, Mihovil Perlić-** Research on the Impact of Short-Range Technology as Cyber Attack Vector

**Andrea Senova and Miroslav Betus-** Design of an Efficient Production Process and Logistics Activities in a Manufacturing Company

**19:00-23:00 Gala Dinner in Dubrovnik Old Town + Best Paper Award (together with co-located conference [EAI ICDF2C 2024](#))**

**Friday, 11th of October 2024**

**09:00-13:00** Technical Session and Closing Ceremony