

Proposal for Special Session at IEEE CASE 2022

Goal:

This special session, organized by the RAS-Technical Committee on Automation in Logistics, aims at dealing with the problems concerning the planning and control of products, freight and people flows and the related information. The mission of the logistics in production and transportation systems, public organizations and services is to organize the right resources to the right place at the right time, while optimizing suitable performance measures and satisfying a given set of constraints.

This special session aims at gathering researchers and practitioners interested in the application of automation, optimization, simulation and ICT methodologies to Manufacturing, Logistics and Intelligent Transportation Systems, in order to outline new trends and problems in this area. Theoretical, methodological and application papers are welcome, including but not limit to, modeling and simulation, scheduling and optimization, artificial intelligence and big data, digitization in logistics, cooperation of production-logistics in the fields such as smart transportation, multimodal transport, smart harbors, smart logistics, and smart manufacturing.

Session Title: Advances and New Challenges in Logistics and Transportation Systems

Organizers:

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Contributions:

1. “A periodic discrete event approach for the optimal charging of electric buses with multiple sockets charging stations” by Virginia Casella, Giulio Ferro, Luca Parodi, Michela Robba.

2. “Electric Vehicle Routing Based on Smart-Charging Method” by María A. del Cacho Estil-les, Maria Pia Fanti, Agostino M. Mangini, Michele Roccotelli, Walter Ukovich
3. “A real-time synchromodal framework with co-planning for integrated container and vehicle routing” by Wenjing Guo, Rie Larsen, Bilge Atasoy, Wenfeng Li
4. “Container identification algorithm based on improved Hough Transform” by Jingxuan Shao, Yong Zhou
5. “Semi-physical simulation for anti-swing control of rail-mounted gantry crane” by Yu Chen, Yong Zhou, Zhengkang Fu
6. “Integrated Scheduling Optimization of Equipment in Multimodal Transport Harbor Considering the Delay of Vessels Arrival Time” by Pengfei Yang, Lei Cai, Wenfeng Li
7. “Industrial Artificial Intelligence: - A Predictive Agent Concept for I4.0” by Luis Alberto Cruz Salazar, Birgit Vogel-Heuser
8. “Multi-task Learning-based Approach for Bus Passenger flow prediction” by Pengzhen Zhang, Xingquan Zuo, et al.
9. “Lane Tracking for RTG Assisted Driving in a Container Yard” by Yunjian Feng and Jun Li