

INVITED SESSION SUMMARY

Title of Session: Multi-Agent Systems in Transportation

Name, Title and Affiliation of Chair:

Professor Mahdi Zargayouna, Université Gustave Eiffel, France

Details of Session (including aim and scope):

This session aims to bring researchers and practitioners together to discuss how agents and multi-agent systems technologies can be used to model, simulate, optimize, and manage large-scale, heterogeneous, multimodal, and complex transportation systems. We are looking for research papers, case studies, and practitioners' reports on the implementation and use of multi-agent systems in all areas related to all modes of transportation and logistics.

Topics:

- ✓ Applications of Multi-Agent Systems in traffic, transportation, and transport logistics
- ✓ Optimization (e.g., traffic assignment, routing, route choice)
- ✓ Autonomic transportation systems
- ✓ Coordination in intelligent transportation systems
- ✓ Intelligent, adaptive traffic control
- ✓ Distributed decision-making in traffic, transportation, and transport logistics
- ✓ Multi-agent systems for intelligent vehicles
- ✓ Mobile devices in smart transportation systems
- ✓ Autonomous vehicles and collaborative driving
- ✓ Self-* properties of traffic systems
- ✓ Agent-based approaches to modeling driver behavior
- ✓ Agent-based simulation of traffic and transportation systems
- ✓ Agent-based pedestrian and crowd simulation
- ✓ Shared and on-demand mobility (car sharing, ride sharing, Mobility as a Service, etc.)

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

- Dr. Jean-Michel Auberlet (Université Gustave Eiffel, France)
- Prof. Favien Balbo (Mines Saint-Etienne, France)
- Prof. Dariusz Barbucha (Gdynia Maritime University, Poland)
- Prof. Khaled Ghédira (Central University, Tunisia)
- Dr. Sebastian Hörl (SystemX, France)
- Prof. Francziska Klugl (Orebro University, Sweden)
- Prof. René Mandiau (Valenciennes University, France)
- Prof. Philippe Mathieu (Lille University, France)
- Prof. Omer Rana (Cardiff University, UK)
- Dr. Mohamed Rahal (VEDECOM, France)
- Dr. Julien Saunier (Mines Saint-Etienne, France)
- Prof. Gérard Scemama (Université Gustave Eiffel, France)
- Dr. Giuseppe Vizzari (UNIMIB, Italy)
- Dr. Besma Zeddini (CY Tech, France)

Website URL of Call for Papers (if any):

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