



Call for Papers

SS03 – Technologies for Autonomous Outdoor Logistic Functions

Organized and Chaired by

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FOCUS.

The ever-growing demand for urban parcel delivery has led to many new solutions for autonomous outdoor logistic functions in unstructured environments and also fosters new use cases like autonomous waste collection. On the factory floor related transportation tasks are already highly automated, e.g., by autonomous guided vehicles. This session focuses on the challenges when transferring such in-factory technologies to urban settings. This involves new ideas on the processes involved, coping with the related regulatory regimes, employing existing infrastructures or automating navigation tasks. This session discusses urban last mile logistics on a holistic basis and aims to combine it with the large body of knowledge on intra-logistics and thereby bring together technology, processes and regulation. Work on prototype and proof-of-concept implementations are highly welcome.

TOPICS

- ❖ Process design for last mile and outdoor logistics
- ❖ Vehicle design in unstructured environments
- ❖ Navigation and localization in outdoor environments
- ❖ Safety of autonomous robots in outdoor environments and crowded areas
- ❖ Functional Safety for classification tasks
- ❖ Operation, evolution and management of last mile logistics and its vehicles
- ❖ Communication technologies in outdoor environments
- ❖ Regulatory topics and special permits for testing

AIM

This Special Session aims at bringing together professionals from industry and academia to share cutting-edge concepts, recent developments, research results, and practical achievements in outdoor and last mile logistics and the technology transfer from intra logistics and automations towards that area.

SOLICITED PAPERS

- ◆ Original Research (Regular) ◆ Surveys ◆ Industry practice ◆ Work-in-progress

The working language of the conference is English, For submission rules, please refer to the Author's Instruction on the conference website.

PAPER ACCEPTANCE

Accepted, registered, and presented papers will be copyrighted by IEEE and published in the conference proceedings. The proceedings will be available in the IEEE Xplore® Digital Library. The final manuscript must be accompanied by a registration form and a registration fee payment proof and it is mandatory that at least one author attends and presents the paper at the conference. Failure to adhere to these guidelines may result in paper exclusion from post-conference distribution via IEEE Xplore by the ETFA 2024 Organizing Committee. All conference attendees must pay the conference registration fee and cover their own personal expenses for travel and accommodations.

AUTHOR'S SCHEDULE 2024

❖ Regular and special sessions papers

Submission deadline **April 28th**
Acceptance notification **May 31st**
Deadline for final manuscripts **July 1st**

❖ Work-in-progress/ Industry practice papers

Submission deadline **May 26th**
Acceptance notification **June 17th**
Deadline for final manuscripts **July 1st**