Call for Papers: IEEE SSRR 2024

Papers are solicited for the 2024 IEEE International Symposium on Safety Security Rescue Robotics, Nov. 12-14, 2024, in New York City, USA, in conjunction with FDNY special operations. Extended abstracts (3-4 pages) are due 21 Jul, with acceptances on 10 Sept and full papers due 10 Oct. Details will be posted to <u>ssrr2024.org</u>.

IEEE SSRR was started in 2002 with a special mission to bring together roboticists and practitioners, where academics can present domain-relevant research and engage with agencies, responders, and companies. The conference is single track with full papers published in IEEE Xplore. It traditionally sets aside time for field tours of training facilities or hosts exercises, in this case, with the Fire Department New York at their training facilities on Roosevelt Island. it is a hands-on, community-oriented conference. There is a best paper award.

The safety, security, and rescue robotics community focuses on the ethical use of robots for public safety and security applications, such as law enforcement, anti-terrorism, nuclear decommissioning, and inspection of critical infrastructure, all phases of emergency management (presentation, preparedness, response, and recovery), and humanitarian assistance and disaster relief. Robot safety and risk of robots in general, for example preventing injuries or guaranteeing real-time execution, are not topics included in the symposium's purview but safety and risk in the context of the extreme environments and operating conditions of SSRR applications is. SSRR is a field robotics domain, and although papers describing theoretical results are welcome, all papers should be motivated by real users' needs, both clearly stating who are the end users and what are the anticipated or demonstrated practical end user requirements.

The topics include, but are not limited to:

- aerial, ground, and marine robots
- new morphologies and sensors
- artificial intelligence
- computer vision/machine learning
- human-robot interaction
- ethics
- field methodologies for testing and evaluation
- multi-robot systems
- extreme scenarios and environments
- infectious diseases
- natural disasters
- human-caused disasters, such as building, bridge, and mine collapses
- humanitarian assistance and disaster recovery
- robot simulators
- case studies and surveys
- casualty assessment, care, and extraction
- detection and mitigation of chemical, biological, radiological, nuclear, and explosive (CBRNE) events
- inspection of critical infrastructure

Organizers:

- General Co-Chairs: Murphy, Robin (Texas A&M), Howie Choset (Carnegie Mellon)
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- Local Arrangement Chair: Loianno, Guiseppe (New York University)
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