SSRR 2009 ◆ IEEE 🅡🅐

2009 IEEE International Workshop on Safety, Security, and Rescue Robotics
University of Denver
Denver, Colorado, USA
November 3-6, 2009

WEBSITE: http://www.engr.du.edu/ssrr2009

EMAIL: ssrr09-program@du.edu

Sponsored by:
IEEE Robotics and Automation Society
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IMPORTANT DATES:
JUNE 15, 2009
  Full Papers and Demos Due
AUGUST 15, 2009
  Notification of Acceptance
SEPTEMBER 30, 2009
  Final Papers Due

VENUE
Denver is the gateway to the central Rocky Mountains and is an outdoorsman's paradise. Situated on the edge of the Rocky Mountains, Denver is a major transportation hub separating the mountain West from the Great Plains. Boulder, 30 km to the northwest, sits nearly on the intersection of the Continental Divide (the string of snow-capped 4300m peaks that divide the nation's watershed) and the front range foothills, creating idyllic mountain vistas and accessible, cosmopolitan living. Known for its natural beauty, excellent skiing, and world-class rock climbing, the Denver metro area is a destination for travellers the world over.

The 2009 IEEE International Workshop on Safety, Security, and Rescue Robotics (SSRR2009) is dedicated to identifying and solving the key issues necessary to field capable robots across a variety of challenging applications. This year it will be hosted at the University of Denver (November 3-6, 2009). This seventh workshop in the series will address both the research challenges posed by search and rescue scenarios and the design of deployable robotic systems that satisfy user-defined requirements. It will create a unique opportunity for development and exchange of research ideas and technical solutions. As always, emergency responders and other expected users will be involved in presentations and discussions to ensure the practical relevance of technology developments for actual usage. Topics for papers and demonstrations, include:

- Robot performance requirements and technical solutions for applications of SSRR (urban search and rescue, CBRN hazard detection/mitigation, explosive ordinance disposal, physical security, surveillance, …)
- Locomotion for ground, aerial, aquatic, indoor, and collapsed structures
- Perception for navigation, hazard detection, and victim identification
- Mapping of complex environments (2-D, 3-D, GIS integration, …)
- Manipulation capabilities (hazards, payloads, obstacles, doors, …)
- Communications for reliable data transfer (tether management, radio, …)
- Intelligent behaviors to improve robot performance and survivability
- Human-robot interfaces for improved remote situational awareness
- Autonomous search and exploration
- Multi-robot teams and mixed human-robot teams
- Training methods and other personnel issues
- Safety standards of robots and systems
- Evaluation and performance metric of robotic systems
- Emerging technologies (sensors, power sources, micro robots, …)
- Emergency management issues related to robotics
- Mechanisms, Mechatronics, and Embedded Control

Full Papers should be submitted through the website in PDF format. Six camera-ready pages including figures are allowed for each paper. Maximum of two additional pages are permitted at 50 USD per page extra charge.

Robot Demonstrations are welcome and will be incorporated into the program if accepted. Please submit a one page description of how your demonstration will be compelling for safety, security, or rescue robot developers and users to see, along with images and a video of the demonstration (MPEG files up to 10 MB).