CALL FOR PAPERS

SSRR 2015

2015 IEEE International Symposium on Safety, Security, and Rescue Robotics

Purdue University
West Lafayette, Indiana, USA
October 18-20, 2015

WEBSITE: http://robotics.purdue.edu/ssrr2015

Sponsored by:
IEEE Robotics and Automation Society
Technically Co-Sponsored by:
Purdue University, USA

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IMPORTANT DATES:

~~**JUNE 15, 2015**~~ **JUNE 30, 2015**
Full Papers and Demos Due
AUGUST 15, 2015
Notification of Acceptance
SEPTEMBER 15, 2015
Final Papers Due

VENUE

Indianapolis, located 65 miles SSE of West Lafayette, is commonly referred to as the "Crossroads of America" due to its strategic position as a node in the United States' interstate transportation system and as a major agricultural producer. Indiana is one of the nation's largest corn and soybeans producers – major field crops feeding the nation and the world. It is also the second largest producer of popcorn, ice cream and tomatoes in the country. Situated in the heart of the American Midwest, West Lafayette is a small college town with easy access to Indianapolis and Chicago. Purdue University's graduate and undergraduate pro-grams in engineering are both ranked among the top ten programs in the country and Purdue's international student population in STEM fields is the largest in the United States.

The 2015 IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR2015) is an international forum for furthering the study of key issues underpinning the research of safety, security and rescue robotics as well as solutions necessary for the fielding of robots and sensor systems across a variety of challenging application areas. This year it will be hosted at Purdue University (October 18-20, 2015), which lies between Chicago, Illinois and Indianapolis, Indiana in the heart of the Midwest. This thirteenth symposium in the series welcomes submissions of papers on the theory and practice of robotics and automation for all types of safety, security, and rescue applications such as disaster response, mitigation and recovery; rapid and secure inspection of critical infra-structure; detection of chemical, biological and radiological risks, and operations in these dangerous sites. The symposium 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:

- Autonomous search and rescue
- Casualty assessment, care and extraction
- Communications for reliable data transfer
- Detection and mitigation of chemical, biological, radiological, nuclear and explosive (CBRNE) events
- Humanitarian applications
- Human-robot interaction and interfaces
- Inspection of critical infrastructure
- Intelligent behaviors to improve robot performance and survivability
- Manipulation
- Multi-agent coordination
- Novel sensors and mechanisms
- Nuclear decommissioning
- Perception for navigation, hazard detection, and victim identification
- Robotics and Automation for safety and security
- Safety standards for robots and systems
- SLAM in complex and/or extreme environments
- Telemedicine

SSRR encourages submissions of novel and innovative papers focused on traditional and emerging areas and applications in safety, security, and rescue robotics.

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)