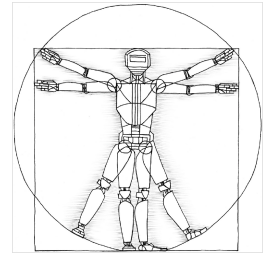


CALL FOR PAPERS

Robotics: Science and Systems 2009

<http://www.roboticsconference.org/>

University of Washington, Seattle, June 28–July 1, 2009



Description: The 2009 Robotics: Science and Systems Conference will bring together researchers working on algorithmic or mathematical foundations of robotics, robotics applications, and analysis of robotic systems. High quality, original papers are solicited in all areas of robotics. The final program will be the result of a highly selective review process designed to include the best work of its kind in every category. The conference will be single track to allow attendees an opportunity to experience the best research in all areas of robotics. The program will include invited talks as well as oral and poster presentations of refereed papers. Conference dates are Sunday, June 28 through Wednesday, July 1, 2009. Workshops will run all day Sunday and Monday morning and the main conference track begins Monday afternoon and continues through Wednesday. As in previous years, efforts are underway to make RSS affordable, particularly for student attendees.

Organizing Committee

General Chair:	Jeff Trinkle (Rensselaer)
Program Chair:	Yoky Matsuoka (University of Washington)
Local Arrangements Chairs:	Dieter Fox and Rajesh Rao (University of Washington)
Workshop Chair:	Lydia Kavraki (Rice University)
Publicity Chair:	Devin Balkcom (Dartmouth)
Publications Chair:	Jose Castellanos (University of Zaragoza)
Webmaster:	Scott Rose (University of Washington)

Area Chairs:

Srinivas Akella (UNC Charlotte)	Hajime Asama (University of Tokyo)
Devin Balkcom (Dartmouth)	Ayanna Howard (Georgia Tech)
Tetsunari Inamura (NII)	Eric Klavins (University of Washington)
Jana Kosecka (George Mason)	Danica Kragic (Royal Institute of Technology)
Jun Morimoto (ATR)	Jose Neira (University of Zaragoza)
Allison Okamura (Johns Hopkins)	Toru Omata (Tokyo Institute of Technology)
Lynne Parker (University of Tennessee)	Stergios Roumeliotis (University of Minnesota)
Nicola Simeon (LAAS)	Russ Tedrake (MIT)

Important Dates:

Paper submissions:	Jan 15, 2009, 23:59:59 PST (firm)
Rebuttal phase:	Mar 9–13, 2009, 23:59:59 PST
Notification:	Apr 15, 2009
Preproceedings Publication Date:	June 15, 2009
Conference:	Jun 28–July 1, 2009

Submissions: Papers containing original and unpublished work are solicited in all areas of robotics, including (but not limited to) the following:

- Mechanisms: Design, Humanoids, Hands, Legged Systems, Snakes, Novel Actuators, Reconfigurable Robots, MEMS/NEMS, Micro/Nanobots
- Kinematics, Dynamics, and Control: Contact Modeling, Grasp Synthesis, Dexterous Manipulation, Assembly
- Human-Robot Interaction and Human Centered Systems: Brain-Machine Interfaces, Haptics, Tactile Interfaces, Telerobotics, Human Augmentation, Assistive Robots, Social Robots, Robots and Art
- Distributed Systems: Sensor Networks, Multi-Robot Systems, Networked Robots, Robot Soccer
- Mobile Systems and Mobility: Mapping, Localization, SLAM, Collision Avoidance, Exploration, Mobile Robot Control, High-Speed Navigation
- Applications: Underwater Robotics, Aerial/Space Robotics
- Medical Robotics: Robot-assisted procedures, Smart surgical tools, Rehabilitation robotics, Interventional therapy, Image-guided procedures, Surgical simulation, Soft-tissue modeling, Telesurgery
- Biological Robotics: Biomimetic robotics, Robotic investigation of biological science and systems, Cell manipulation, Neurobotics, Prosthetics
- Robot Perception: Vision, Remote Sensing, Tactile Perception, Range Sensing
- Planning and Algorithms: Motion Planning, Mission Planning, Coordination, Complexity and Completeness, Computational Geometry, Robotics and Molecular Biology, Simulation
- Estimation and Learning for Robotic Systems: Reinforcement Learning, Bayesian Techniques, Graphical Models, Imitation Learning, Programming by Demonstration, Diagnostics

Paper Format: Papers may be up to eight pages long, including figures and references, using 10 point or larger font. All text and figures must fit within a 9 inch by 6.5 inch rectangle on a page in double-column format. Submissions violating these guidelines will not be reviewed. A LaTeX template is available at: <http://www.roboticsconference.org/submissions.shtml>.

Review Criteria: Submissions will be refereed on the basis of technical quality, novelty, significance, and clarity. Each submission will be thoroughly reviewed by at least three program committee members. Reviews will not be double-blind. A rebuttal period will allow authors an opportunity to respond to the reviews. Submissions, reviews, and the replies of the authors will then be discussed at a meeting that all Area Chairs will attend. There will be an opportunity after the meeting for authors to revise accepted manuscripts.

Special Journal Issues: After the conference, special RSS 2009 issues of *International Journal of Robotics Research* and *Autonomous Robots* will be produced, each containing expanded versions of a selection of the best papers from the conference.

Policy on Multiple Submissions: RSS will not accept any paper which, at the time of submission, is under review for publication in a book, journal, proceedings, or other archival medium, nor will it accept papers that have been published or accepted for publication in any archival medium. Authors are also expected not to submit their papers elsewhere during the RSS reviewing period. These restrictions apply only to journals and conferences, not to workshops and similar specialized presentations with a limited audience and without archival proceedings. Authors are required to indicate any such potential conflict in a footnote on the first page of the submission.