SIMPAR 2010

Last Updated Sunday, 11 October 2009

2nd International Conference on
SIMULATION, MODELING, and PROGRAMMING
for AUTONOMOUS ROBOTS (SIMPAR 2010)November 15 18, 2010 – Darmstadt, Germany
First Call for Papers

Novel robotics applications driven by research, industry and society call for the development of systems of ever increasing complexity: systems with sliding autonomy; humanoid robots; distributed robots; mobile sensor networks, and so on. But nfortunately, steady improvements in robot hardware have not been matched by corresponding advancements in robot software. Besides fundamental open problems still waiting for sound answers, the development of new robotics applications still suffers from the lack of widely used tools, libraries, and algorithms ready to be incorporated into new rojects. Simulation environments are playing a main role in reducing development time and cost of large scale systems. But their use is still regarded by many with skepticism. Seamless migration of code from general purpose simulators to real orld systems is still a rare circumstance, due to the complexity of robot, world, sensors, and actuators modeling. These challenges drive the quest for next generation of methodologies and tools for robot development. The objective of the International Conference on Simulation, Modeling, and Programming for Autonomous Robots (SIMPAR) is to offer a unique forum for these topics and to bring together researchers from academia and industry to identify and solve the key issues necessary to ease the development of increasingly complex robot software, and to boost a smooth shifting of results from simulated to real applications

Topics of interest include, but are not limited to:
- 3D robot simulation
- Reliability, scalability and validation of robot simulation
- Simulated sensors and actuators
- Offline simulation of robot design
- Online simulation with realtime constraints
- Simulation with software/hardware in the loop
- Middleware for robotics
- Modeling framework for robots and environments
- Testing and validation of robot software
- Standardization for robotic services
- Communication infrastructures in distributed robotics
- Interaction between sensor networks and robots
- Human robot interaction and collaboration
- Multirobot systems The organizing committee invites proposals for the workshop and tutorial program to be held on November 15, one day before the technical sessions. General Chair Oskar von Stryk (TU Darmstadt, Germany) Local Chair Thomas Hemker (TU Darmstadt, Germany) Tutorial Chair Davide Brugali (University of Bergamo, Italy) Workshop Chair Emanuele Menegatti (University of Padua, Italy) International Program Co-Chairs America: Stephen Balakirsky (NIST, USA) Asia: Noriaki Ando (AIST, Japan) Europe: Monica Reggiani (University of Padua, Italy) Steering Committee America: Maria Gini (University of Minnesota, USA) Lynne Parker (University of Tennessee, USA) Asia: Tamio Arai (University of Tokyo, Japan) Xiaoping Chen (University of Science and Technology of China) Europe: Herman Bruyninckx (Katholieke Universiteit Leuven, Belgium)Enrico Pagello (University of Padua, Italy) Important Dates (tentative) Deadline for submission of papers: June 1, 2010 Proposals for tutorials/workshops: May 1, 2010 Notification of acceptance: July 26, 2010 Submission of final camera-ready papers: August 27, 2010