

Workshop Proposal for MED 2007

RoboCup: Introduction and Scientific Challenges

Alfredo Weitzenfeld, Nikos Vlassis

Workshop length: half or full day

Abstract:

For the past few years RoboCup has been a popular arena for testing collaboration and competition skills among multiple autonomous robots. These competitions provide a common ground where scientific advances can be studied and evaluated under real-time conditions in both real robots and simulated leagues. The workshop provides an overview of RoboCup different leagues and presents the technical and scientific challenges involved in RoboCup soccer. The speakers are researchers experienced in directing RoboCup teams. The workshop gives several insights into what it takes to compete at RoboCup, the major robotic contest in the world while discussing the scientific challenges.

Workshop format:

We expect to have a number of invited speakers, and depending on the number of submissions, a few oral presentations.

Call for Contributions:

We invite experienced RoboCup participants to submit a short paper, maximum 5 pages, describing your prior RoboCup participations, giving an introduction and overview of scientific challenges in your particular RoboCup league. Use same paper format as for MED2007. Accepted papers will be published in the workshop proceedings and speakers will be invited to present their work during the workshop. Interested participants should send a PDF file to Alfredo Weitzenfeld [alfredo@itam.mx] or Nikos Vlassis [nikos.vlassis@gmail.com] by **April 30th, 2007**.

Audience:

The workshop provides an opportunity for students and faculty to familiarize with RoboCup and familiarize both with the competitions and scientific challenges involved in them presented by experienced RoboCup participants.

Organizers:

Alfredo Weitzenfeld is the director of Eagle Knights team from ITAM in Mexico and RoboBulls from USF. The Eagle Knights team competes since 2003 in the small-size (SSL) and since 2004 in the four-legged (4L) league with participations in several World Cup, US Opens and Latin American Opens. The Eagle Knights are the current SSL and 4L Latin American champions. Alfredo Weitzenfeld co-directs the EK-Lyon team in the @Home league at RoboCup. Alfredo Weitzenfeld is the RoboCup SSL Organizing Committee Chair for Atlanta 2007. He is a Professor at ITAM and currently in sabbatical at USF.

Nikos Vlassis has been the research coordinator of the UvATrilearn team (2d simulation league) of the University of Amsterdam, The Netherlands, from 2001 until 2006. The UvATrilearn team has won the World Championship once (2003), the German Open three times (2002,2003,2004), and the American Open once (2003). Nikos Vlassis is currently with the Technical University of Crete.