Call for Participation

Fifteenth Annual AAAI Mobile Robot Competition & Exhibition

July 16–20 ▲ Boston, Massachusetts

Sponsored by the American Association for Artificial Intelligence

WE INVITE YOU TO PARTICIPATE in the Fifteenth Annual AAAI Mobile Robot Competition and Exhibition, sponsored by the American Association for Artificial Intelligence. The Competition brings together teams from universities, colleges, and research laboratories to compete and to demonstrate cutting edge, state of the art research in robotics and artificial intelligence. The 2006 AAAI Mobile Robot Contest and Exhibition will be held in Boston, Massachusetts, as part of AAAI-06, from July 16-20, 2006. The program will include the Robot Challenge, the Open Interaction Task, the Scavenger Hunt, the Robot Exhibition, and the Mobile Robot Workshop. Registration will soon be open at http://palantir.swarthmore.edu/aaai06/registration.php and details of the events will soon be available on the aaai and swarthmore websites. You will be required to complete the AAAI registration form as well and submit it with your payment.

The Robot Challenge

The goal of the Robot Challenge is to work toward the development of an interactive social robot. Toward that end, the challenge requires that the robot participate in the AAAI conference. Aspects of conference participation goals include locating the conference registration desk, registering for the conference, perform volunteer duties, and present talk (and answer questions) at a prescribed time and location. Additionally, the robot should socially interact with other conference participants. Navigational technical challenges include dynamic crowded environments, natural landmark detection, direction understanding and following, and map reading. Social interaction challenges may include natural conversation regarding the robot and the conference and personalization of conversation with recognized individuals (by name, badge, or face). All of these things should be done in as close to the normal environment as possible.

Scavenger Hunt

Robots search the conference hotel area for a checklist of given objects such as people or information located at specific locations or at a specific time. This task will require robots to navigate and map a dynamic area with moving objects or people in order to acquire objects to satisfy the checklist.

We welcome a variety of teams to enter with one or more robots and/or human operators, but every entrant must demonstrate AI techniques during the competition. A key aspect of this event is having the robots interact with people in the environment during timed missions run throughout the course of the conference. More specific rules and guidelines will be posted shortly. We encourage urban search and rescue teams with AI components to consider joining this event.

Open Interaction Task

This event will take the place of the Robot Host event in past years and will probably involve interacting with conference attendees to achieve a particular task in an unstructured environment. The goal of the open interaction task event is to entertain people using robots and to provide AI and robotics researchers a refreshing venue for demonstrating AI techniques for interactive, entertainment, and social robots. Some of the topics include navigation, cognitive modeling, perception, emotional state modeling, natural language processing, and human-robot interaction.

Entrants may be any system that demonstrates some level of AI. In particular, we are looking for systems that are entertaining and strongly encourage teams to include human-robot interaction as part of their entry.

The Robot Exhibition

The mission of the robot exhibition is to demonstrate state of the art research in a less structured environment than the competition events. The exhibition gives researchers an opportunity to showcase current robotics and embodied-AI research that does not fit into the competition tasks. In addition to research, exhibits that demonstrate how robotics can be used to enhance education in AI and other related courses are highly encouraged.

The Mobile Robot Workshop

A robotics workshop will be held on the last day of the conference. Teams who receive travel support must attend and present at the workshop. All other participants are strongly encouraged to attend and present. A research paper will be required within one month after the end of the workshop, and will be published in a workshop proceedings by AAAI.

Fees and Funding

Limited travel funding will be available. If you wish to receive travel funding, the deadline for registering your intent to participate is May 15, 2006 (via the web registration). Each team will be required to pay a $250 participation fee that will help AAAI to defray the cost of the competition. This fee is in line with fees charged by other robotic events, and helps AAAI move towards a sustainable funding model for the event.

General Cochairs: Paul Rybski (prybski at cs.cmu edu) and Jeffrey Forbes (forbes at cs.duke.edu).