

Call for Participation

Sixteenth Annual AAAI Mobile Robot Competition and Exhibition

July 22–26, 2007 Vancouver, British Columbia

Sponsored by the American Association for Artificial Intelligence

Photo courtesy John Sinai, Tourism Vancouver

We invite you to participate in the Sixteenth 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 2007 AAAI Mobile Robot Contest and Exhibition will be held in Vancouver, Canada, as part of AAAI-07, from July 22-26, 2007. The program will include the Scavenger Hunt, Human-Robot Interaction event, Integration Challenge, the Robot Exhibition, and the Mobile Robot Workshop. Registration and full details of the events will soon be available at the competition website. You will be required to complete the AAAI registration form as well and submit it with your payment.

Scavenger Hunt

In this competition, robots are given a listing of objects that they must locate and recognize. In order to determine what these objects look like, the robots are given an opportunity to search the web for images of the objects in their list before starting their search. This competition attempts to push the state of the art of semantic image understanding by requiring that robots make use of the wealth of unstructured image data that exist on the Internet today.

We welcome a variety of teams to enter with one or more robots and/or human operators. More specific rules and guidelines will be posted shortly. We particularly encourage object recognition researchers and urban search and rescue teams to consider joining this event.

Human-Robot Interaction

This event will take the place of the Robot Host event from past years and will involve interacting with conference attendees to achieve a particular task in an unstructured environment. The goal is to entertain attendees 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 include human-robot interaction as part of their entry.

Integration Challenge

The goal of the integration challenge is to integrate various existing algorithms and architectural components that have been developed independently within one architecture to produce a working system on a mobile robot that is (1) robust, (2) fault-tolerant, (3) flexible, and (4) easily adaptable to new tasks. All participating teams will be provided with a set

of existing open-source components available for the research community (e.g., speech recognizers, vision processing components, etc.).

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.

Travel 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, 2007 (via the web registration).

Participation Fees

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 competitive robotic events, and helps AAAI to move towards a sustainable funding model for the annual robot competition.

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