



Call for Participation

AAAI-99 Mobile Robot Competition & Exhibition

July 19-21, 1999, Orlando, Florida

Sponsored by the American Association for Artificial Intelligence

*We are now seeking participants —
competition teams, exhibitors, and challenge teams!*

The Eighth Annual AAAI Mobile Robot Competition and Exhibition, held in conjunction with the AAAI National Conference on Artificial Intelligence, brings together teams from universities and other research laboratories to compete—and also to demonstrate cutting edge, state-of-the-art research in robotics and artificial intelligence.

The mission of the Mobile Robot Competition and Exhibition is to serve AAAI, AI-robotics researchers, and the larger AI community by promoting innovative research through events which appeal to media and sponsors, while conducting these events in a format that facilitates comparison of approaches, but at low risk to individual or institutional reputations. Our goals are to:

- Foster the sharing of research ideas and technology
- Allow research groups to showcase their achievements
- Encourage students to enter robotics and artificial intelligence fields at both the undergraduate and graduate level
- Increase awareness of the field

In previous years, the event has attracted both local and national news media—the 1996 contest resulted in a segment on Alan Alda's *Scientific American Frontiers* program on the Discovery Channel.

The Competition and Exhibition comprises three separate events; participants may enter any number of these events:

Contest

The contest allows teams from universities and other labs to show off their best attempts at solving common tasks in a competitive environment. Teams compete for place awards as well as for technical innovation awards, which reward particularly interesting solutions to problems. There will be two contest events this year. Details and rules are available from the web site listed below.

Exhibition

The exhibition gives researchers an opportunity to demonstrate state-of-the-art research in a less structured environment. Exhibits are scheduled through several days of the conference, and in addition to live exhibits, a video proceedings is produced.

Challenge

In addition to the contest and exhibit, we are adding a new aspect this year—the Robot Challenge. In this event, a particular-

ly challenging task is defined which is well beyond current capabilities, will require multiple years to solve, and should encourage larger teams and collaborative efforts. The challenge task is defined by a long-term committee of researchers. Currently the task is for a robot to be dropped off at the front door of the conference venue, register itself as a student volunteer, perform various tasks as assigned, and talk at a session. The challenge will require integration of many areas of artificial intelligence as well as robotics.

A web page has been set up at: www.aic.nrl.navy.mil/~schultz/aaai99/ and will be linked to the AAAI home page. The web page contains the latest information on the contest rules, travel support, and details on how to participate.

New participants are strongly encouraged to familiarize themselves with the competition by reviewing articles about prior entries in previous issues of *AI Magazine* and the Robotics Competition Corner columns in the *Robotics and Autonomous Systems* journal (online versions at www.mines.edu/fs_home/rmurphy/column/), plus visiting the web sites of previous AAAI competitions.

Teams who receive travel money must attend and present at a one-day workshop following the conference, with the flavor of an AAAI symposium. All other participants will be strongly encouraged to attend and present. A research paper of 2-4 pages will be required in advance, and will be published in a proceedings. The purpose of this workshop is to allow researchers to understand and benefit from each other's efforts.

In order to be eligible for sponsored funding, competing teams may have to satisfy specific criteria related to their competitiveness and the feasibility of their approach. These may include demonstrating a minimum level of functionality (as evidenced by a videotape of the robot doing basic tasks), intrinsic innovation, etc. We interpret this to mean that teams who start earlier and are transferring research results to their entry will get higher priority for funding.

For more information, please contact the chairs at aaai-robots@gmu.edu

Organizing Chairs

General Chair: Alan C. Schultz (NRL)

Contest Cochair: Lisa Meeden (Swarthmore College)

Exhibit Cochair: Karen Haigh (Honeywell)

Challenge Cochair: Tucker Balch (CMU)