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## **FOR IMMEDIATE RELEASE**

### **National Mobile Robot Competition and Exhibition 2004**

**July 27-28, 2004**

**San Jose McEnery Convention Center**

**Menlo Park, Calif –July 24, 2004.** For thirteen years, the American Association for Artificial Intelligence has sponsored the Mobile Robot Competition. It is held in conjunction with the National Conference on AI (AAAI-04). Each year, the tasks are more difficult, and the capabilities of the competing autonomous robots are more sophisticated. Teams from 15 leading robotics research labs from universities, colleges and research laboratories compete and demonstrate state-of-the-art research in robotics and AI. (<http://palantir.swarthmore.edu/aaai04/>).

The Robot Competition will be held Tuesday and Wednesday, July 27-28, 10:00 am - 6:00 pm.

This year there will be three events:

- **Rescue Robot Competition** challenges robots in a simulated fallen structure to find human victims, and direct human rescuers to the victims. The event is being developed in close coordination with experienced rescue professionals and will use the highly challenging U.S. National Institute of Standards and Technology Standard Test Course for Urban Search and Rescue.

This event, first introduced to the competition three years ago, is designed to give entrants an opportunity to work in search and rescue operations – a domain that proved of critical importance shortly after the tragedy of 9-11 when teams that competed at that year's event

swiftly transported their robots to Ground Zero of the World Trade Center and offered assistance to the search efforts. (See the September 10, 2002 archived news release, "In the Aftermath of September 11: What Roboticians Learned from the Search and Rescue Efforts" at [www.aaai.org/Pressroom/pressroom/html](http://www.aaai.org/Pressroom/pressroom/html).) (more)

- 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 a robot to participate in the AAAI conference.

Aspects of conference participation include: locating the conference registration desk, registering for the conference, performing volunteer duties, and presenting a talk (and answer questions) at a prescribed time and location. Additionally, the robot should socially interact with other conference participants.

- Open Interaction Task The goal of this event is to entertain people using robots. The hope is that this event will provide AI and robotics researchers a refreshing venue for demonstrating AI techniques in navigation, cognitive modeling, perception, emotional state modeling, and human-robot interaction. Entries in all shapes, sizes, and capabilities are welcome to enter.
- The Robot Exhibition The purpose of the Robot Exhibition is to give researchers an opportunity to present their latest robotics and embodied-AI research in a non-competitive environment. During the robot exhibition, a number of groundbreaking new designs have been demonstrated through the years, such as a stair-climbing wheelchair robot with human passenger aboard, and this past year a self-reconfiguring robot that could automatically change its shape to navigate in different modes. This year there will be six robots exhibited, including: a team of small Lego robots moving in formations based on recognized gestures sketched on PDA (University of Missouri-Columbia), a multi-purpose mobile service robot with ability to track people and interact with them using natural language (University of Notre Dame), ButlerBot (Stony Brook University), Social Robots (Human Emulation Robotics) human interaction system with a realistic human face, a failure-tolerant robotic software architecture (Washington University), and GRACE and GEORGE (Carnegie Mellon University, Naval Research Lab, and Swarthmore College), two robots working together to provide concierge service for the conference.

### **Botball Competition**

Co-located with AAAI-04 is the National Conference on Education Robotics (NCER) and the Botball Competition designed to get students in middle school, high school and college involved in robotics. ([www.botball.org](http://www.botball.org))

### **Background**

Founded in 1979, the American Association for Artificial Intelligence ([www.aaai.org](http://www.aaai.org)) is a nonprofit scientific membership society devoted to advancing the science and practice of AI. Its mission is to: (1) advance the scientific understanding of the mechanisms underlying intelligent thought and behavior, (2) facilitate their embodiment in machines, (3) serve as an information resource for research planners and the general public concerning trends in AI, and (4) offer training for the current and coming generations of AI researchers and practitioners. The organization sponsors an annual National AI conference, the Innovative Applications of AI conference, the Mobile Robot Competition and Exhibition, and numerous symposia and workshops.

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