

## Call for Papers



# Physically Grounded Artificial Intelligence Special Track at AAAI-10

July 11–15, 2010  
Atlanta, Georgia USA

Sponsored by the Association for the Advancement of Artificial Intelligence

### Important Dates

*January 18 2010:* Abstracts Due

*January 21 2010:* Paper Submissions Due

*March 26 2010:* Author Notifications

*April 13, 2010:* Final Electronic Camera Ready Abstracts Due at AAAI Office

Robotics, computer vision, activity recognition, and the many other disciplines where computers interface to physical environments have proven to be a major source of inspiration and crucial new insights into artificial intelligence. Physical grounding provides ready access to a challenging, real problems of perception and action with rich source of data and the related stochastic effects. Further, applications of physically grounded AI have enormous potential to improve research, learning, entertainment, commerce, and society as a whole.

The special track invites research papers on AI techniques, systems and concepts applied to physically grounded systems including activity recognition, robotics, and machine perception.

Papers should either describe related research or clearly explain how the work addresses problems in physically embodied agents, opportunities, or issues underlying such systems. Relevant topics include the following:

- AI for Robotics
- Activity Recognition
- Computer Vision
- Intelligence and Perception for Human-Robot interaction
- Machine Learning applied to robotics, vision, and other activities grounded in the real world
- Machine Learning for control and decision making
- Motion planning
- Prediction and planning for transportation
- Sensor Networks
- Three-Dimensional Machine Perception

Papers will be reviewed by qualified reviewers drawn from a special track committee, with specific expertise in the above areas, as well as the general AAAI program committee. Submissions to this special track deemed not to be relevant may be considered for review for the general technical papers track at the discretion of the track and conference cochairs.

### Author Registration

Authors must register at the AAAI-10 PGAI web-based technical paper submission site ([pgai.confmaster.net](http://pgai.confmaster.net)). The software will assign a password, which will enable the author to log on to submit an abstract and paper. In order to avoid a rush at the last minute, authors are encouraged to register as soon as possible after December 1.

### Abstract and Paper Submission

Electronic abstract and paper submission through the AAAI-10 PGAI paper submission site is required on or (preferably) before the deadline dates listed above. We cannot accept submissions by e-mail or fax.

Papers must be in trouble-free, high resolution PDF format, formatted for US Letter (8.5" x 11") paper, using Type 1 or TrueType fonts. Papers may be no longer than 6 pages including references, and formatted in AAAI two-column, camera-ready style (see the author instructions page). Please note that these formatting instructions are for final, accepted papers; no additional pages can be purchased at the review stage. In addition, the copyright slug may be omitted in the initial submission phase. Please also refer to the instructions on how to prepare your paper for blind review.

Authors will receive confirmation of receipt of their abstracts or papers, including an ID number, shortly after submission. AAAI will contact authors again only if problems are encountered with papers. Inquiries regarding lost papers must be made no later than January 28, 2010.

### Submissions to Other Conferences or Journals

Papers submitted to this conference must not have been accepted for publication elsewhere or be under review for another AI conference. However, to encourage interdisciplinary contributions, we may consider unpublished work that has been submitted or presented in part to a forum outside of AI. The guidelines of the AAAI policy on multiple submissions are fully detailed below and must be carefully followed.

### Review Process

Program committee members will identify papers they are qualified to review based on the information submitted electronically (the paper's title, keywords, and abstract). Their re-

viewing will be done blind to the identities of the authors and their institutions.

Authors will have a limited opportunity to respond to initial reviews. This author's feedback may then be taken into account in the final reviews and recommendations. The program committee's reviews will make recommendations to the track cochairs. Although the track cochairs will formally make all final decisions, in practice almost all will be made earlier in the process.

### **Publication**

Accepted papers will be allocated six (6) pages in the conference proceedings. Up to two (2) additional pages may be used at a cost to the authors of US\$275 per page. Final papers exceeding eight (8) pages and those violating the instructions to authors will not be included in the proceedings. Authors will be required to transfer copyright of their paper to AAAI.

### **Questions and Suggestions**

Concerning author instructions and conference registration, write to:

aaai10@aaai.org

Concerning suggestions for the program and other inquiries, write to the PGAI Track Cochairs.

### **Special Track Cochairs**

J. Andrew Bagnell (Carnegie Mellon University)

Martial Hebert (Carnegie Mellon University)

Odest Chadwicke Jenkins (Brown University)

### **AAAI-10 Policy Concerning Submissions to Other Conferences or Journals**

Papers submitted to this conference must not have been accepted for publication elsewhere or be under review for another AI conference. (The AAAI Nectar and Challenge paper submissions have specific guidelines that can be found in their respective call for papers.)

To encourage interdisciplinary contributions, AAAI will consider work that has been submitted or presented in part elsewhere, if it is unlikely to have been seen by more than a few members of the AAAI audience (however, see the exception for Challenge Track papers). As such, papers may not be dually submitted to other AI or AI subarea conferences. Papers under submission to a journal that contain overlap with AAAI papers will be considered as long as the author specifies the dual submission and certifies that the journal submission contains significant material that is not included in the AAAI submission. Papers that have been published in full in another conference or journal will not be accepted for review. Novelty is an important criterion in the selection of papers.

AAAI requires the following:

Authors must specify the conferences and journals to which the paper has been dually submitted.

Authors must withdraw papers under review or accepted for other AI conference venues if the paper is submitted to AAAI.

Papers not dually submitted should so indicate on the title page.

For questions as to whether a given meeting is considered under the dual submission policy, or for clarifications of this policy, submitters should contact the Program Chairs.