

*Registration*

# 2006 AAAI Fall Symposium Series

**October 13–15, 2006 ■ Hyatt Regency Crystal City, Arlington, Virginia**

*Sponsored by the American Association for Artificial Intelligence*

445 Burgess Drive, Menlo Park, California 94025 

650-328-3123  650-321-4457 (fax)  [www.aaai.org/Symposia/Fall/fso6.php](http://www.aaai.org/Symposia/Fall/fso6.php)

## **Tentative Program Schedule** *(subject to change)*

### **Friday, October 13**

9:00 AM – 5:30 PM: Symposia sessions

6:00 PM – 7:00 PM: Reception

### **Saturday, October 14**

9:00 AM – 5:30 PM: Symposia sessions

6:00 PM – 7:00 PM: Plenary session

### **Sunday, October 15**

9:00 AM – 12:30 PM: Symposia sessions

Registration will be located in the Exhibit Foyer on the Exhibit Level.

The American Association for Artificial Intelligence is pleased to present its 2006 Fall Symposium Series, to be held Friday through Sunday, October 13–15 at the Hyatt Regency Crystal City in Arlington, Virginia, adjacent to Washington, DC. The titles of the eight symposia in the 2006 fall symposia series are:

- Aurally Informed Performance: Integrating Machine Listening and Auditory Presentation in Robotic Systems (1)
- Capturing and Using Patterns for Evidence Detection (2)
- Developmental Systems (3)
- Image Comprehension (4)
- Integrating Reasoning into Everyday Applications (5)
- Interaction and Emergent Phenomena in Societies of Agents (6)
- Semantic Web for Collaborative Knowledge Acquisition (7)
- Spacecraft Autonomy: Using AI to Expand Human Space Exploration (8)

The highlights of each symposium will be presented at a special plenary session. Notes will be prepared and distributed to participants in each symposium, but will not otherwise be available unless published as an AAAI Technical Report or edited collection.

Each symposium will have limited attendance. Participants will be expected to attend a single symposium throughout the symposium series. In addition to participants selected by the program committee of the symposia, a limited number of other interested parties will be allowed to register in each symposium on a first-come, first-served basis. To register, please fill out the registration form, and send it along with payment to:

2006 Fall Symposium Series  
AAAI  
445 Burgess Drive  
Menlo Park, CA 94025-3442  
Telephone: 650-28-3123\*  
Fax: 650-321-4457\*  
E-mail: [fso6@aaai.org](mailto:fso6@aaai.org)\*

*\*Credit card orders only, please. Please note that there are security issues involved with the transmittal of credit card information over the Internet. AAAI will not be held liable for any misuse of your credit card information during its transmittal to AAAI.*

Online registration is also available at [www.aaai.org/Symposia/Fall/fso6.php](http://www.aaai.org/Symposia/Fall/fso6.php), along with this document.

# **Aurally Informed Performance:**

## **Integrating Machine Listening and Auditory Presentation in Robotic Systems**

**R**obots designed to function as appliances and human surrogates in public and private settings are already being moved from research projects to fully deployed systems. In keeping with the goals of intuitive human-robot interaction, many of these platforms incorporate rudimentary speech communication interfaces, and others are engineered for specific types of listening tasks. Even so, aurally informed behaviors in robots, and their integration with other perceptual and reasoning systems, remain far behind the broad and mostly transparent skills of human beings.

Part of the problem is that while much is known about the human physiology of listening, much less is understood about how conceptually bounded information is extracted from the mixtures of sounds that are typically present in interactive settings. This is the problem of auditory scene analysis—how people make sense of what they hear. Just as people do, robots must be able to determine the location of sound sources and their type. They must associate certain sounds with the causes of the sounds and events. When interacting with people, robots must be able to converse on the basis of what they hear and see and may even have additional, nonspeech auditory display functions ranging from alerting to the playback of captured sounds. Social settings also raise practical performance issues for robots such as being interrupted while speaking, excessive ambient noise or quiet, the user’s physical listening distance, the acceptability of being overheard or disturbing others, and so on.

The purpose of this symposium is to gather together researchers in machine listening, speech systems, and general robotics, as well as those in other disciplines, including AI, neuroscience, and the cognitive and social sciences, who are interested in a collaborative, interdisciplinary exploration of the range of issues that concern aurally informed performance in robots. The goal is to share results, positions, and insights across boundaries that concern challenges in robotic audition, auditory presentation, and the integration of these functions with other sensory and processing systems in the context of human-robot interaction and the auditory needs and preferences of users.

### **Organizing Committee**

Derek Brock (cochair), Naval Research Laboratory (derek.brock@nrl.navy.mil); Ramani Duraiswami (cochair), University of Maryland (ramani@umiacs.umd.edu); and Alexander I. Rudnicky (cochair), Carnegie Mellon University (alex.rudnicky@cs.cmu.edu).

# Capturing and Using Patterns for Evidence Detection

Pattern-based analysis of data plays an increasing role in several important applications. In crime prevention (including securities trading, tax fraud, and homeland security) it is being used both to detect evidence of criminal events and to predict threatening activities before they completely mature. In marketing it is being used to assess trends in the aggregate sentiments of populations as well as the preferences of individuals. In epidemiology it is used to assess health trends in populations and provide early warning of epidemics. In these applications the data is typically incomplete and becomes available incrementally over time, and it can often support alternative interpretations, so assessing the quality of the evolving evidence among a set of competing hypotheses is critical. This symposium will bring together researchers from diverse backgrounds, including machine learning, data management, graph theory, link analysis, information retrieval, privacy, automated reasoning, and knowledge representation, to promote advances in acquiring and using patterns for detecting and managing evidence in data.

## Relevant Topics

- Learning patterns from data
- Identifying patterns efficiently within massive, structured, or partially structured data
- Matching algorithms for specific data characteristics (inexact matching, and so on.)
- Reasoning with patterns (deduction, abduction, induction, disjunction, negation, and so on.)
- Representing patterns and hypotheses
- Hypothesis management (monitoring predictions, interactive refinement, and so on.)
- Managing conflicting and uncertain data (probabilities, knowledge gaps, and so on.)
- Data and reasoning provenance
- Data access issues (privacy, secrecy, proprietary, and so on.)
- Applications (homeland security, fraud detection, epidemiology, marketing, and so on.)

- Evaluation of pattern analysis systems
- Pattern and hypothesis sharing among tool sets (interlingua, work flows, and so on.)
- Data and algorithm characterization
- Equality detection (alias resolution, and so on.)
- Group detection (collaboration networks, and so on.)

## Invited Speaker

Eric Rickard, Disruptive Technology Office, will speak on “R&D Interests and Priorities of the Intelligence Community.”

## Organizing Committee

Ken Murray (cochair), SRI International (murray@ai.sri.com); Ian Harrison (cochair), SRI International (harrison@ai.sri.com); Fotis Barlos, BAE Systems; Tina Eliassi-Rad, Lawrence Livermore National Laboratory; Henry Goldberg, National Association of Securities Dealers; Tim Darr, 21st Century Technologies, Inc.; Dunja Mladenic, J. Stefan Institute; Robert Popp, Aptima, Inc.; Ben Rode, Cycorp

## More Information

For more information see [www.ai.sri.com/~murray/aaai-patterns/](http://www.ai.sri.com/~murray/aaai-patterns/).

In nature, the processes of biological development have been pivotal in nature's ability to construct adaptable, modularized, and self-repairing systems of incredible complexity. The development of multicellular organisms from a single cell provides a plentiful and rich source of knowledge and inspiration for constructing developmental systems that model biological processes or enhance evolutionary design systems.

Development biology-inspired approaches represent a method for facilitating the construction of robust, complex adaptive systems in a more modular and evolvable manner than conventional methods. For example the state of the art in evolutionary robotics involves evolving controllers for robots with fixed morphologies, rather than all aspects of the robot. Artificial developmental systems may be useful for overcoming this limitation: biological development relies on coupled growth of all of an organism's subsystems in parallel, and the evolution of modular gene subnetworks and phenotypic modules.

This symposium is intended to stimulate discussion about how best to extract the key principles of biological development as they relate to design of complex artifacts and computation in general. We will focus discussions around the following questions:

- Which mechanisms of biological development are useful as general design principles, and which are only relevant to biological development?
- What purpose does computational development serve?
- What is the current state of computational development and its future?
- What is the relationship between development and evolution in both natural and artificial systems?

- How should we define the terms “development,” “morphogenesis,” and “regeneration” in our field, as opposed to how they are used in biology?

- How would one compare the design abilities of a standard evolutionary algorithm to a developmental system?

- How can desirable design principles – such as adaptation, evolvability, scalability, and modularity – be maximized in a developmental system?

- What kind of benchmarks and metrics could be used to test and compare different developmental systems?

## Organizing Committee

Sanjeev Kumar (cochair), Cornell University; Gregory S. Hornby (cochair), UCSC University Affiliated Research Center at NASA Ames Research Center; Joshua Bongard (cochair), Cornell University.

## More Information

For more information see [web.mae.cornell.edu/kumar/aaai.htm](http://web.mae.cornell.edu/kumar/aaai.htm).

# Image Comprehension

For most computer vision applications, a typical system is composed of the following four components: (1) acquisition—sensor inputs, (2) processing—object and pattern recognition and labeling, (3) analysis—means of obtaining quantitative and qualitative information from an image, and (4) comprehension (understanding)—knowledge about the image which supports rapid decision making and action.

The underlying hypothesis of this symposium is that it may not be necessary to go through this sequence of steps in depth to arrive at some level of comprehension rich enough to support real time decision-making and action.

The symposium is interested in robotic image comprehension (not image acquisition, processing or analysis in the classical sense). We solicit papers that address the endowment of robots with a machine-intelligence approach to near real time image comprehension. This may involve such things as novel representations and systematic handling of evolving image information or the real time generation and use of informal ontologies to support the comprehension process from a semantic-technology perspective.

Topics of interest include the following:

- *Rapid determination of the meaning of the content of an image:* In order to support near real time decision making on the part of a robot looking at the image of a scene, methods for assigning meaning to the images features are needed. What are they?
- *Minimal clues (features) to support comprehension:* Assuming that for the rapid comprehension of an image by a robot only selected features in the image are necessary, then what are these features, how are these features selected, and how can a minimal number of features be identified? These are some of the questions that need to be addressed.
- *Semantic (and syntactic) predisposition of a robot to image comprehension:* What does a robot need to know ahead of time in order to realize rapid image comprehension? What roles do limited and unlimited ontologies play in image comprehension? How does it obtain these ontological capabilities?
- *Mental models formed by a robot to support rapid image comprehension:* How does a robot formulate a mental model of an image that can be used to support rapid comprehension and decision making?

• *Learning techniques for the enhancement of image comprehension capabilities:* Over a period of time it is postulated that, with appropriate learning mechanisms, the robot's performance at image comprehension will improve. What are these mechanisms?

• *Mathematical formulation of image comprehension concepts:* How can image comprehension be formalized to enable analysis and optimization?

## Organizing Committee

Walt Truskowski (walt.truskowski@nasa.gov),  
Jacqueline Le Moigne, Bir Bhanu

## More Information

For more information see [aaaisymposium.gsfc.nasa.gov/](http://aaaisymposium.gsfc.nasa.gov/).

# Integrating Reasoning into Everyday Applications

Applications such as e-mail clients, Web browsers, spreadsheets, and personal finance programs have become an integral part of modern daily life. The user base of some of these programs are in the hundreds of millions of users.

Intelligent reasoners can aid the users of these programs in several ways. Firstly, they can automate routine, repetitive, or tedious tasks, freeing the user from doing so himself. Secondly, they can script time-critical actions to be taken by the application, even if the user is unavailable or not fast enough to do so himself. Finally, they can be used to constrain aspects of the program's behavior to meet the user's needs.

For example, e-mail filtering rules save the user from having to send e-mail from a known spammer to the trash can and can take timely action such as automatically forwarding important e-mail to a coworker while the user is disconnected from the Internet. Or rules can specify constraints or preferences on what type of music an mp3 player should play during particular times of the day, or what types of programs a digital video recorder should record. These rules might be directly specified by the end user or learned automatically by the application. Furthermore, the application might be called upon to explain its actions, which requires further reasoning.

Looking to the future, the promise of the semantic web has opened up the possibility of "Scripting the World," as intelligent reasoners can reference arbitrary conditions on the Web and produce corresponding side-effects on the Web. Furthermore, the Semantic Desktop movement promises to integrate ontologies and metadata into the everyday desktop environment. This symposium is concerned with all aspects of making intelligent reasoners accessible to everyday users, and in incorporating reasoners into everyday applications. Such applications include, but are not limited to: e-mail clients, spreadsheets, Web browsers, multimedia players, digital video recorders, digital calendars, digital address books, internet telephony applications, financial and accounting applications, home robots, and word processors.

Specific topics to be discussed at the symposium include the following:

- Logical spreadsheets
- Semantic e-mail
- Cognitive robotics
- Common sense reasoning
- Knowledge based reasoning

The symposium will be highly interactive with ample time set aside for discussions and roundtables. We encourage members of industry and researchers in all related fields to attend.

## Organizing Committee

Michael Kassoff, Stanford University; Heiner Stuckenschmidt, University of Mannheim; Andre Valente, Knowledge Systems Ventures; Michael Witbrock, Cycorp

## More Information

For more information see [logic.stanford.edu/everyday/](http://logic.stanford.edu/everyday/).

# Interaction and Emergent Phenomena in Societies of Agents

Whereas multiagent systems have been extremely helpful in solving engineering problems, much of what we find exciting lies in their applications to contemporary human life. In particular, the focus of this symposium is on self-constituting systems and networks composed of human and nonhuman agents characteristic of emergent cyber cultures. This meeting is an opportunity not only to share insights and experiments in multiagent systems, but to theorize hybridity formed at the junction of the human and nonhuman.

Multiagent systems, we submit, cross disciplinary boundaries by focusing on society and culture as emerging from the interactions of autonomous agents. Poised at the intersection of AI, cybernetics, sociology, semiotics and anthropology, this strand of multiagent systems research enables a powerful perspective illuminating not only how we live and learn now, but also, through focusing on emergence, how we anticipate the future.

By convening this interdisciplinary symposium, we hope to form new network assemblages of variegated agents of researchers and their techniques out of which may arise new perspectives on heretofore parochial questions in our respective disciplines.

A wide range of relevant questions will be addressed via theoretical and practical studies and discussions, such as the emergence of prelinguistic concepts, shared representations, meaning and language; characterization of the fungible, shifting networks created by human and nonhuman agents; what are the knowledges, translations or other hierarchies that emerge in such settings; and what tools we use in these explorations.

## Organizing Committee

Goran Trajkovski (cohair), Towson University (gtrajkovski@towson.edu); Samuel Collins (cohair), Towson University; Georgi Stojanov, American University in Paris, France; Michael North, Argonne National Laboratories; Laszlo Gulyas, AITIA International Inc., Hungary

## More Information

For more information see [pages.towson.edu/gtrajkov/FSS2006/Welcome.html](http://pages.towson.edu/gtrajkov/FSS2006/Welcome.html).

# Semantic Web for Collaborative Knowledge Acquisition

Recent advances in computing, communications together with the rapid proliferation of information sources and services present unprecedented opportunities in integrative and collaborative analysis and interpretation of distributed, autonomous (and hence, inevitably semantically heterogeneous) data and knowledge sources and services in virtually every area of human activity. The symposium aims to bring together researchers in relevant areas of artificial intelligence, databases, knowledge bases, machine learning, information integration, ontologies, semantic web, web services, and relevant application areas (such as bioinformatics, environmental informatics, enterprise informatics e-science, e-government, medical informatics, security informatics, social informatics, among others) to share recent advances in the state of the art in semantic web technologies for such applications.

Topics of interest include, but are not limited to:

- Cyberinfrastructure and semantic web technologies for collaborative knowledge acquisition
- Modeling semantically heterogeneous data sources and services
- Collaboratively developing and sharing of ontologies and interontology mappings
- Discovering and resolving inconsistencies within and among ontologies
- Representing and reasoning with ontologies and mappings between ontologies
- Discovering mappings between data source schemas and between ontologies
- Querying distributed, semantically heterogeneous information sources
- Acquiring knowledge from distributed, autonomous, semantically heterogeneous information sources
- Acquiring knowledge from partially specified data
- Exploiting distributed knowledge and data in dynamic data-driven applications
- Discovering and composing semantically heterogeneous services
- Modeling, tracking and using information provenance
- Modeling and reasoning about trust of information sources and services
- Extracting knowledge and facts from dis-

tributed text and multimedia data

- Preserving privacy, selectively sharing information and knowledge
- Case studies, software tools, and prototypes

The symposium will include a series of half-day sessions, each addressing a challenge area. Sessions will include invited talks providing overviews of key topics, short presentations based on contributed papers, a poster session for work in progress, breakout sessions focusing on specific research challenges and emerging research directions, a panel discussion and a wrap-up session.

## Organizing Committee

Vasant Honavar (chair), Iowa State University; Tim Finin (cochair), University of Maryland, Baltimore County; Doina Caragea, Kansas State University; Sally McClean, University of Ulster; Ion Muslea, Language Weaver, Inc; Raghu Ramakrishnan, University of Wisconsin-Madison; Steffen Staab, Koblenz University.

## Additional Information

Questions may be directed to [honavar@cs.ias.tate.edu](mailto:honavar@cs.ias.tate.edu). For more information, see [www.cild.ias.tate.edu/events/aaai06symposium.html](http://www.cild.ias.tate.edu/events/aaai06symposium.html).

# Spacecraft Autonomy: Using AI to Expand Human Space Exploration

Autonomy will be a key component in future human exploration missions. Artificial intelligence technology can provide robust solutions to systems automation and mission operations coordination and can enable an incremental approach that extends from partial subsystem automation to coordination and oversight of distributed operations involving multiple systems and crew.

The goal of this symposium is to identify and explore the artificial intelligence technologies that will allow NASA and other space organizations to operate spacecraft and surface habitats with increased safety and reliability, while reducing the lifecycle costs in terms of mission planning, training, operations and maintenance. Key research issues include: adjustable, human-in-the-loop automation that helps crew and mission operations staff work more safely and efficiently; techniques that robustly handle failures and unplanned outcomes, as well as interruptions and overrides from crew; and techniques to develop and validate automation software and applications. We will also focus on critical functions of spacecraft autonomy such as:

- Resource management
- Fault detection, isolation and recovery
- Integrated health management
- State assessment
- Mode management
- Onboard checkout
- Mission management
- Procedure execution
- Coordination with humans

We will organize the symposium in a way that encourages discussion as to the best approaches to spacecraft autonomy. We plan to use breakout groups devoted to the topics listed above to discuss research challenges and technology options. We will invite speakers from government, academia and industry to highlight key challenges in building the next generation of crewed spacecraft.

## Organizing Committee

Ari Jonsson, NASA Ames Research Center/USRA (cochair); David Kortenkamp, NASA Johnson Space Center/Metrica Inc. (cochair); Gautam Biswas, Vanderbilt University; Robert Brown, Draper Laboratory

## More Information

For more information, see [www.traclabs.com/fss06/](http://www.traclabs.com/fss06/)

ALL ATTENDEES MUST PREREGISTER. Each symposium has a limited attendance, with priority given to invited attendees. All accepted authors, symposium participants, and other invited attendees must register by September 1, 2006. After that period, registration will be opened up to the general membership of AAI and other interested parties. All registrations must be postmarked by September 22, 2006.

The conference registration fee includes admission to one symposium, one copy of the working notes from the symposium, coffee breaks, and the opening reception.

Checks (drawn on US bank) or international money orders should be made out to AAI. VISA, MasterCard and American Express are also accepted. Please fill out the attached registration form and mail it with your fee to:

AAI 2006 Fall Symposium Series  
445 Burgess Drive  
Menlo Park, CA 94025

If you are paying by credit card, you may e-mail the form to [fss06@aaai.org](mailto:fss06@aaai.org) or fax it to 650-321-4457. Registration forms are also available on AAI's web page: [www.aaai.org/Symposia/Fall/fss-06.php](http://www.aaai.org/Symposia/Fall/fss-06.php).

*Please note: All refund requests must be in writing and postmarked by September 29, 2006.* No refunds will be granted after this date. A \$50.00 processing fee will be levied on all refunds granted.

When you arrive at the Hyatt Regency, please pick up your complete registration packet at the registration area.

Registration hours will be:

Friday, October 13  
8:00 AM - 5:00 PM  
Saturday, October 14  
8:30 AM - 5:00 PM  
Sunday, October 15  
8:30 AM - 11:00 AM

## Hotel Information

For your convenience, AAI has reserved a block of rooms at the Hyatt Regency Crystal City. The hotel is adjacent (less than one mile) to Reagan National Airport and minutes away from downtown Washington, DC, Alexandria, and Georgetown. It is also conveniently located to Metro

rapid transit and near a wide selection of restaurants and shopping.

The conference rates per night are:

\$150.00 single  
\$175.00 double  
\$200.00 triple  
\$225.00 quad

Rates do not include applicable state and local taxes (approximately 10.25%), or hotel fees in effect at the time of the meeting. Symposium attendees must contact the Hyatt Regency directly. Please request the group rate for the American Association for Artificial Intelligence when reserving your room. **The cut-off date for reservations is September 20, 2006.** Reservations after this date will be accepted based on availability at the hotel's prevailing rate. All reservations must be secured by one night's deposit per room, via credit card or check. Reservations may be cancelled with no penalty up to 4:00 PM, 24 hours prior to the date of arrival. After that time, a penalty of one night's room and tax will be incurred. Upon check-in, date of departure must be confirmed. Early departure will result in \$50.00 early checkout penalty.

Hyatt Regency Crystal City  
2799 Jefferson Davis Highway  
Arlington, Virginia  
22202 USA  
*Group Reservations:* 703-418-1234  
or 800-233-1234  
*Fax:* 703-418-1289  
[hyatt.com](http://hyatt.com)

## Airport Transportation

### Hyatt Shuttle

The Hyatt Regency Crystal City operates a complimentary Reagan National Airport shuttle between 6:00 AM and midnight.

### Metro Rail

Take the Blue or Yellow line to the Crystal City Station. Take the escalators from the station up to the street. Once you are at the top of the escalators, turn to the left toward the brown Metro sign. The Hyatt shuttles stop at the corner (look for the White/Red Shuttle sign) every 1/2 hour. For pick-up at the Metro, you may call the hotel directly at 703-418-1234.

# Accommodations & Transportation

## **Car**

Follow signs to Crystal City. Take the Rt. 1 South exit and get in the left hand lane. Turn left at first light, 27th Street. The hotel is on the left.

For directions from Washington Dulles Airport or other points, please see <http://crystalcity.hyatt.com/property/areaguide/maps/index.jhtml>

Parking is available at the Hyatt Regency for a maximum of \$23.00 per day.

## **Taxi**


The approximate fare from Reagan National Airport is \$8.00 one way.

## **Disclaimer**

In offering the Hyatt Regency Crystal City (hereinafter referred to as "Supplier"), and all other service providers for the AAAI Fall Symposium Series, the American Association for Artificial Intelligence acts only in the capacity of agent for the Supplier which is the provider of hotel rooms and transportation. Because the American Association for Artificial Intelligence has no control over the personnel, equipment or operations of providers of accommodations or other services included as part of the Symposium program, AAAI assumes no responsibility for and will not be liable for any personal delay, inconveniences or other damage suffered by symposium participants which may arise by reason of (1) any wrongful or negligent acts or omissions on the part of any Supplier or its employees, (2) any defect in or failure of any vehicle, equipment or instrumentality owned, operated or otherwise used by any Supplier, or (3) any wrongful or negligent acts or omissions on the part of any other party not under the control, direct or otherwise, of AAAI.

# Registration Form

## AAAI 2006 Fall Symposium Series

ALL ATTENDEES MUST PREREGISTER  Please complete in full and return to AAAI, postmarked by September 1, 2006 (invited attendees) or by September 22, 2006 (general registration). The fee includes attendance at one symposium, a copy of the symposium notes, and the reception.

Please print or type (registration cannot be processed if information is incomplete or illegible):

First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
 Company or Affiliation \_\_\_\_\_  
 Address \_\_\_\_\_ Home  or Business   
 City \_\_\_\_\_ State \_\_\_\_\_  
 Zip or Postal Code \_\_\_\_\_ Country \_\_\_\_\_  
 Daytime Telephone \_\_\_\_\_ E-mail Address \_\_\_\_\_

### Symposium

I will attend the following symposium: *(Please check only one of the following symposia)*

- 1. Aurally Informed Performance: Integrating Machine Listening and Auditory Presentation in Robotic Systems
- 2. Capturing and Using Patterns for Evidence Detection
- 3. Developmental Systems
- 4. Image Comprehension
- 5. Integrating Reasoning into Everyday Applications
- 6. Interaction and Emergent Phenomena in Societies of Agents
- 7. Semantic Web for Collaborative Knowledge Acquisition
- 8. Spacecraft Autonomy: Using AI to Expand Human Space Exploration

### Registration Fee

*(Students must send legible proof of full-time student status.)*

- Member: \$ 290.00    Nonmember: \$ 450.00    Student Member \$ 115.00    Nonmember student: \$ 200.00

### AAAI Platinum Registration

*Includes a one year new or renewal membership in AAAI. (Students must send legible proof of full-time student status.)*

- Regular (US / Canada) Member: \$ 385.00    Student Member (US Canada) \$ 150.00  
 Regular (International) Member \$ 425.00    Student Member (International): \$ 190.00

TOTAL FEE *(Please enter correct amount.)*   \$ \_\_\_\_\_

### Method of Payment

All e-mail and fax registrations must be accompanied by credit card information. Checks (drawn on a US bank) should be made payable to AAAI. **Prepayment is required. No purchase orders will be accepted.** *(Please circle one)*

AMERICAN EXPRESS   MASTERCARD   VISA   CHECK

\*The card verification number on Visa and Mastercard is a 3-digit number printed on the back of your card. It appears after and to the right of your card number. On American Express cards, the verification number is a 4-digit number printed on the front of your card. It appears after and to the right of your card number.

Credit card number \_\_\_\_\_ Verification No.\* \_\_\_\_\_ Expiration \_\_\_\_\_

Name *(as it appears on card)* \_\_\_\_\_ Signature \_\_\_\_\_

Credit Card Billing Address \_\_\_\_\_ Business Name \_\_\_\_\_

Please mail your check to AAAI FSS-06 Symposium Series • 445 Burgess Drive • Menlo Park, CA 94025 or fax with credit card information to 650-321-4457. *Please Note:* Requests for refunds must be received in writing by September 29, 2006. No refunds will be granted after this date. A \$50.00 processing fee will be levied on all refunds granted.

**Thank You for Your Registration!**

*Please Join Us in Washington D.C.!*

