

Registration

2005 AAAI Spring Symposium Series

March 21–23, 2005 ■ Stanford University, Stanford California

*Sponsored by the American Association for Artificial Intelligence
In Cooperation with Stanford University*

Registration Deadlines

- February 11, 2005: Invited participants
- February 18, 2005: Hotel reservation cut-off date
- February 25, 2005: Final (open)
- March 4, 2005: Refund requests in writing

The American Association for Artificial Intelligence, in cooperation with Stanford University's Department of Computer Science, presents the 2005 Spring Symposium Series, to be held Monday through Wednesday, March 21-23, 2005, at Stanford University. The topics of the eight symposia are:

- AI Technologies for Homeland Security
- Challenges to Decision Support in a Changing World
- Developmental Robotics
- Dialogical Robots: Verbal Interaction with Embodied Agents and Situated Devices
- Knowledge Collection from Volunteer Contributors
- Metacognition in Computation
- Persistent Assistants: Living and Working with AI
- Reasoning with Mental and External Diagrams: Computational Modeling and Spatial Assistance

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:

2005 Spring Symposium Series
AAAI, 445 Burgess Drive
Menlo Park, CA 94025
Telephone: (650) 328-3123*
Fax: (650) 321-4457*
Email: sss05@aaai.org

*Credit card orders only, please. Please note that there are security issues involved with the transmittal of credit card information over the inter-

net. AAAI will not be held liable for any misuse of your credit card information during its transmittal to AAAI.

This document is also available at www.aaai.org/Symposia/Spring/2005/sss-05.html

Tentative Program Schedule

(subject to change)

Monday, March 21

9:00 AM - 5:30 PM: Symposia sessions

6:00 AM - 7:00 PM: Reception

Tuesday, March 22

9:00 AM - 5:30 PM: Symposia sessions

6:00 PM - 7:00 PM: Plenary session

Wednesday, March 23

9:00 AM - 12:30 PM: Symposia sessions

Registration will be held at Stanford University on the lower level of the Cummings Art Building in the foyer of Annenberg Auditorium.

AI Technologies for Homeland Security

AFTER SEPTEMBER 11, 2001, preempting terrorist acts and providing for the security of citizens at home and abroad has become a top priority for the United States and many other nations around the globe. To achieve this, an overwhelming amount of information needs to be absorbed, processed, interpreted and analyzed in a timely fashion. Various AI technologies can be of great utility in addressing this challenge. For instance, multiagent systems can support information sharing and collaboration among analysts, data mining techniques can discover and extract hidden patterns about terrorist activities buried in large data stores, social network analysis can help assess and predict terrorist intentions and behaviors, and knowledge representations and ontologies can facilitate information fusion, knowledge sharing and semantic understanding.

However, using AI technologies to provide for the security of citizens and the homeland raises many complex issues, for example:

- Can AI technologies augment the ability of human analysts to objectively analyze large quantities of complex, oftentimes ambiguous or contradictory data while simultaneously reducing the impact of their personal biases?
- Can AI technologies be used to enhance collaboration between human and robots in service of homeland security?
- Can AI technologies facilitate information/knowledge sharing and semantic understanding while avoiding cognitive overload?
- Can AI technologies be used in information sharing and data mining applications to improve security while yet also enhancing the privacy of citizens?

The purpose of this symposium is to provide a forum for discussing these and other issues related to AI for homeland security. The symposium will open with an invited speaker from Department of Homeland Security. The invited talk will provide an overview about homeland security challenges.

Topics

The symposium will include sessions on the following topics: (1) agent-based technologies for enhancing the coordination in a team of homeland security knowledge workers, (2) tools for intelligence analysis, (3) threat network analysis, and (4) knowledge representation issues. In addition, two poster sessions will begin with a brief summary of each poster paper, followed by parallel poster presentations and discussions. Several panels of experts will discuss how current or

emerging AI technologies can provide added-values for addressing issues related to homeland security. Further information (including an extended issue list) about the symposium can be found at AI4HS.ist.psu.edu.

Organizing Committee

John Yen (chair), The Pennsylvania State University; Robert Popp (chair), DARPA; Jim Hendler, University of Maryland; Milind Tambe, USC; Katia Sycara, Carnegie Mellon University; Hsinchun Chen, University of Arizona; Robin Murphy, University of South Florida

Challenges to Decision Support in a Changing World

ONE OF THE MOST DAUNTING challenges faced by decision support systems is a perpetual change in their environment. Existing decision support methodologies, tools, and frameworks are often difficult to scale up and adapt to changing knowledge, workflow, and operational setting.

Adaptive systems that have to cope with change must include methodologies that go outside single theories. For example, systems that are based on probabilistic or decision-theoretic principles will be typically unable to cope with change by themselves, as neither probability theory nor decision theory says much about how the decisions are constructed, let alone how they should be modified. The general AI concepts of perception, learning, control, abstraction, and personalization must be inherently designed into the methodological, architectural, and operational aspects of adaptive systems, from application design through software and hardware infrastructure support.

The central themes for the symposium are (1) practical fielding of adaptive decision support systems, and (2) crucial technologies for successful adaptive decision support systems.

The symposium will include invited talks, panels, discussions, and presentations that address the relevant issues and technologies in the domains of biomedicine, engineering, business, military, and homeland security.

We aim to bring together researchers with experience or interest in building adaptive decision support systems and to provide a coherent forum to highlight the various issues involved, facilitating a cross-disciplinary diffusion of methods in reasoning about and adapting to change. We will discuss and address the challenges faced and the solutions involved, what worked, what did not, and why. We also hope to chart out a research agenda and identify specific interesting issues in various technological and application domains.

Organizing Committee

David Aha, Naval Research Laboratory (aha at aic.nrl.navy.mil); Riccardo Bellazzi, Universita degli Studi di Pavia (riccardo.bellazzi at unipv.it); F. Javier Diez, UNED (fjdiez at dia.uned.es); Marek J. Druzdzel (cochair), University of Pittsburgh (marek at sis.pitt.edu); Linda van der Gaag, Universiteit Utrecht (lin-da at cs.uu.nl); Peter Haddawy, Asian Institute of Technology (haddawy at ait.ac.th); Tze-Yun Leong (cochair), National University of Singapore (leongty at comp.nus.edu.sg); Peter Lucas, University of Nijmegen (peterl at cs.kun.nl); Kim Leng Poh, National University of Singapore (isepohkl at nus.edu.sg)

DEVELOPMENTAL ROBOTICS IS A NEW APPROACH that focuses on the autonomous self-organization of general-purpose, task nonspecific control systems. It takes its inspiration from developmental psychology and developmental neuroscience. Developmental robotics is a move away from task-specific methodologies where a robot is designed to solve a particular predefined task (such as path planning to a goal location). This new approach explores the kinds of perceptual, cognitive, and behavioral capabilities that a robot can discover through self-motivated actions based on its own physical morphology and the dynamic structure of its environment. Initially a developmental system might bootstrap itself with some innate knowledge or behavior, but with experience could create more complex representations and actions. Developmental robotics is different from many learning and evolutionary systems in that the reinforcement signal, teacher target, or fitness function comes from within the system. In this manner, these systems are designed to rely more on mechanisms such as self-motivation or homeostatic variables.

This emerging field has been interdisciplinary from its inception, including researchers from psychology, neuroscience, and cognitive science. However, developmental robotics is not as well known, or understood, within the AI community. One purpose of this symposium is to create a forum for introducing AI researchers who have worked on related topics to the field. Such related topics include life-long learning, evolutionary robotics, reinforcement learning, and symbol grounding. In addition, this symposium can help define the emerging discipline of developmental robotics by incorporating the AI perspective.

This symposium will feature paper sessions on developmental architectures, psychologically-inspired developmental models, intrinsic motivational systems, manipulation and self-awareness, and philosophical issues. The symposium will also include panels and posters on these core ideas. Presenters will have the opportunity for doing demonstrations, showing videos, and sharing developmental software.

Additional Information

See the symposium website for additional information (www.cs.brynmawr.edu/DevRob05/).

Organizing Committee

Douglas Blank (cochair), Computer Science, Bryn Mawr College; Lisa Meeden (cochair), Computer Science, Swarthmore College; Stan Franklin, Institute for Intelligent Systems, The University of Memphis; Olaf Sporns, Psychology, Indiana University; and John Weng, Computer Science and Engineering, Michigan State University

Program Committee

Deepak Kumar, Computer Science, Bryn Mawr College; Jim Marshall, Computer Science, Pomona College

Dialogical Robots: Verbal Interaction with Embodied Agents and Situated Devices

DIALOG INTERACTION between human and robot represents a distinct AI challenge and calls for specialized models of human-machine communication. Unlike disembodied software systems, a situated robotic device is experienced by the human as a tangible agent with its own perceptual, analytic, and intentional perspective on the world. Whether a household vacuum, a swarm of micro UAV's, a web-controlled video camera, an intelligent wheelchair, a surgical assistant, or a robotic housecat, dialog interaction can offer the human a means to query and receive insights from the robot's unique perspective, to inform, command and control the device from a distance, to operate in a hands/eyes-unavailable mode in physical reality, or to immerse oneself in the virtual world of a domain scenario.

We have designed a working symposium where members of several AI research and applied communities will meet to investigate the requirements needed to support human dialog communication for a range of robotic applications. Working groups led by invited participants will incorporate their combined expertise to address a set of near future scenarios involving situated devices that require dialog. We will examine the role of dialog in each scenario, and the requirements entailed for background domain knowledge, runtime processing of sensory data, the ability to reason in real time about the state of physical environment, progress toward domain goals, and inferred properties of the human's mental state. The selected examples represent devices that entertain, transport, coach, perform routine tasks, or serve as adaptable personal companions for emotional, educational, or health maintenance support. An invited lecture on human dialog with fictional characters by Herb Clark of Stanford University (author of *Using Language*, 1995) will frame our discussion of situated dialog agents that entertain and teach (sometimes called "educators").

A product of the symposium is to be a framework for describing and justifying dialog requirements based on intended purpose of the application and ideal human experience. Selected position papers will be published prior to the symposium and participants will be invited to submit individual conclusions for follow-on publication in a collective technical report.

Additional Information

For more information, visit the symposium web site at <http://itsresource.com/stottlerhenke/aaai-s2005/> or write to luperfoy@mac.com.

Organizing Committee

Susann Luperfoy (cochair), Stottler Henke Associates; Nicholas Cassimatis (cochair), Rensselaer Polytechnic Institute; Cynthia Breazeal, MIT Media Laboratory; David Miller, University of Oklahoma & KISS Institute for Practical Robotics

Knowledge Collection from Volunteer Contributors

MANY AI TASKS DEPEND on having large amounts of knowledge and data. There are knowledge bases to be constructed, corpora to be tagged, long training sessions, and so forth. Such resources are critical to our success, but building them can be difficult and time-consuming. What if we could farm out most of that work to thousands of volunteers on the web?

This symposium is centered on the idea of collecting knowledge from large groups of volunteer contributors in a distributed environment. Knowledge repositories constructed by volunteers can potentially enable a new generation of knowledge-intensive approaches to open problems and in many AI areas.

We emphasize two thrusts of collection: semantic knowledge, which aids reasoning about everyday world and linguistic knowledge, which aids knowledge-rich natural language processing. Additional emphasis is on applications that demonstrate uses of the collected knowledge, including specifics of approaches to using the knowledge collected from volunteers and their role as motivator and validator of users' contributions.

There are many open challenges in turning to the general public for help. On one hand, the systems need to collect useful knowledge (for example sufficiently unambiguous and cross-validated knowledge of sufficient coverage). On the other, collection needs to be fun and engaging to attract enough volunteers, by, among other things, decomposing hard problems into “bite-sized” chunks, and deriving maximum use from abilities and time of a given volunteer.

Topics

Specific research questions and topics to be addressed include: What kinds of knowledge can and cannot be gathered from volunteer contributors? What knowledge is particularly suitable for collection from volunteers? Which collection tasks can be successfully tackled by massive, distributed (loose) collaboration? How to allocate effort between collection of new knowledge and validation of collected knowledge? What are the design principles of interfaces that attract volunteers and increase contributor retention?

The symposium program will include an invited talk, several sessions with technical paper presentations, a demo/poster session with demonstrations of systems implementing the KCVC con-

cept, and a panel discussion about the role played by the knowledge collected from volunteers in AI applications, and a glimpse on possible future directions for this emerging research area.

Additional Information

For more information, visit the symposium website at <http://teach-computers.org/kcvc05.html>, or contact Timothy Chklovski (timc at isi.edu).

Organizing Committee

Timothy Chklovski, (USC/ISI), Pedro Domingos, (University of Washington), Henry Lieberman, (MIT), Rada Mihalcea, (University of North Texas), Push Singh (MIT)

Metacognition in Computation

THE IMPORTANCE OF METACOGNITION IN HUMAN THINKING, learning, and problem solving is well established. Humans use metacognitive monitoring and control to choose goals, assess their own progress, and, if necessary, adopt new strategies for achieving those goals, or even abandon a goal entirely. For instance, students preparing for an examination will make judgments about the relative difficulty of the material, and use this to choose study strategies. Since in such cases accuracy of metacognitive judgments correlates with academic performance, understanding human metacognition has been an important part of work on automated tutoring systems, and has led to the use of computer assistants that help improve human metacognition.

However, there has also been growing interest in trying to create and investigate the potential benefits of intelligent systems that are themselves metacognitive. It is thought that systems that monitor themselves and proactively respond to problems, can perform better, for longer, with less need for (expensive) human intervention. Thus has IBM widely publicized their autonomic computing initiative, aimed at developing computers, which are (in their words) self-aware, self-configuring, self-optimizing, self-healing, self-protecting, and self-adapting. More ambitiously, it is hypothesized that metacognitive awareness may be one of the keys to developing truly intelligent artificial systems. DARPA's recent Cognitive Information Processing Technology initiative, for instance, foregrounds reflection (along with reaction and deliberation) as one of the three pillars required for flexible, robust AI systems.

On the other side of the coin, it has also been established that metacognition can actually interfere with performance. Metacognition is no panacea, and therefore one of the issues that requires further inquiry is the scope and limits of its usefulness.

Topics

The symposium will bring together researchers from computer science, psychology, philosophy, education, and other disciplines, interested in exploring the possibility of implementing metacognition in AI systems. Through a mixture of formats that will include research reports, invited talks, and guided discussion and brainstorming sessions, we will cover various topics, including reports on implemented metacognitive systems;

computationally tractable models of human metacognition; the relation of recent work on metacognition in computation to work on, for example reflection, control of reasoning, and allocation of computational resources; methods for implementing metacognition in heterogeneous systems; evaluation of different architectures for implementing metacognition; the relationship between metacognition and emotion; domains and/or problems for which metacognition is useful/essential; formal and/or knowledge-representation issues in metacognition; and the limits of metacognition (including cost/benefit analyses).

Additional Information

For more information, please see the symposium website (www.cs.umd.edu/~anderson/ASSMC/).

Organizing Committee

Mike Anderson (cochair), University of Maryland, College Park (anderson at cs.umd.edu); Tim Oates (cochair), University of Maryland, Baltimore County (oates at csee.umbc.edu); Michael Cox, Wright State University (mcox at cs.wright.edu); John Dunlosky, University of North Carolina, Greensboro (j_dunlos at uncg.edu); Don Perlis, University of Maryland, College Park (perlis at cs.umd.edu)

Persistent Assistants: Living and Working with AI

CONSIDER A FUTURE IN WHICH INTELLIGENT AGENTS play a significant role in our personal and professional lives: smart houses will anticipate our actions and needs while personalized agents will tailor entertainment to our preferences, purchase goods for us on-line, monitor our health, and even drive us to the store. At work, agents will arrange meetings and manage our schedules, but they will also help us ensure safety in complicated and stressful situations, such as operating nuclear power plants and conducting space missions. Whether the agents manifest as robots or software processes acting individually or in collections, these applications have two features in common: they call on us to delegate authority to agents whose behavior will materially affect our interests or well-being, and they require a close partnership between users and agents over an extended period of time in order to get the job done.

What will it take to enable this future? Effective assistants will need significant new capabilities to interact with and understand people in ways that we don't yet fully understand. Moreover, the attempt to construct such persistent assistants will raise several broad questions at the intersection of the fields of autonomous systems and human centered computing: How does the context of persistent assistance shape user-agent interaction? What requirements do particular tasks and user populations impose? How can people and assistants communicate changing intentions, goals, and tasks to each other? How is trust developed and maintained? What is the tradeoff between predictable behavior and adjustable autonomy? How will persistent assistants affect people's social and interpersonal relations? How should mixed teams of many people and many agents interact?

This symposium will consider these and related questions by bringing together practitioners of artificial intelligence, human-computer interaction, cognitive modeling, robotics, assistive technologies, and fields that consider complex socio-technical systems. We hope to foster interactions among this highly interdisciplinary set of participants by including presentations from distinct perspectives and by allocating ample time for discussions.

This symposium continues and extends the topics of the very successful AAAI 2003 spring symposium, Human Interaction with Autonomous

Systems in Complex Environments, and the AAAI 2004 spring symposium, Human Interaction with Autonomous Systems over Extended Operations.

Organizing Committee

Daniel Shapiro (chair), ISLE/Stanford University (dgs at stanford.edu); Pauline Berry (cochair), SRI (berry at ai.sri.com); John Gersh (cochair), Johns Hopkins University (john.gersh at jhuapl.edu); Nathan Schurr (cochair), University of Southern California (schurr at usc.edu); David Kortenkamp, NASA Johnson Space Center/Metrica Inc. (korten at traclabs.com); Barney Pell, NASA Ames Research Center (bar-neypell at yahoo.com); Richard Simpson, University of Pittsburgh (ris20 at pitt.edu)

Reasoning with Mental and External Diagrams: Computational Modeling and Spatial Assistance

The role of diagrammatic representations in reasoning processes has been investigated from three different interdisciplinary perspectives: from computational modeling, from spatial assistance, and with respect to the interplay of cognitive processes and external diagrams. All three fields have different foci of interest; however, the fields are closely related to each other.

This symposium explores the role of diagrams in supporting intelligent reasoning processes in humans and technical systems, as well as in human-machine interaction. The focus is on the integration of the three perspectives rather than just on specific results from one of the fields.

Topics

Questions of interest are:

- How do mental representations and external diagrams influence each other while solving spatial problems?
- How can computational cognitive models be used to better assess a user's cognitive needs in performing a spatial task?
- How does knowledge about human imagery inform the process of designing and understanding external depictions?
- What is the role of pictorial space as a representational medium for dealing with problems on various scales?
- How does inspection of diagrammatic representations assist mental model building by novices and by experts?
- How are dynamic aspects of spatial information conveyed in diagrams and how are they processed in mental images?

The symposium will provide an interactive forum with extensive discussion time and group interactions. There will be a series of selected oral presentations with significant question-and-answer time, as well as topic-oriented group discussion sessions.

Besides examining fundamental issues, also practical scenarios and fields of application will be discussed, such as in urban planning or architectural design, with respect to location-based services, or in instruction and education.

Additional Information

For more information visit www.sfbtr8.uni-bremen.de/remedi.

Organizing Committee

Thomas Barkowsky (cochair), Universität Bremen (barkowsky@sftr8.uni-bremen.de); Christian Freksa (cochair), Universität Bremen (freksa@sftr8.uni-bremen.de); Mary Hegarty (cochair), University of California, Santa Barbara (hegarty@psych.ucsb.edu); Ric Lowe (cochair), Curtin University of Technology (R.K.Lowe@curtin.edu.au); Michel Denis, Université de Paris-Sud (Michel.Denis@limsi.fr); John S. Gero, University of Sydney (john@arch.usyd.edu.au); Daniel L. Schwartz, Stanford University (Daniel.Schwartz@stanford.edu)

Registration & General Information

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 February 11, 2005. After that period, registration will be opened up to the general membership of AAAI and other interested parties. All registrations must be postmarked by February 25, 2005.

Your registration fee covers your attendance at the symposium, a copy of the working notes for your symposium, and the reception.

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

AAAI 2005 Spring Symposium Series
445 Burgess Drive
Menlo Park, CA 94025

If you are paying by credit card, you may email the form to sss05@aaai.org or fax it to 650-321-4457. Registration forms are also available on AAAI's web page: <http://www.aaai.org/Symposia/Spring/2005/sss-05.html>.

Please note: All refund requests must be in writing and postmarked by March 4, 2005. No refunds will be granted after this date. A \$50.00 processing fee will be levied on all refunds granted.

When you arrive at Stanford, please pick up your complete registration packet at the Spring Symposium Series 2005 registration desk, which will be located on the lower level of the Cummings Art Building in the foyer of Annenberg Auditorium.

Registration Hours

Registration hours will be:

Monday, March 21

☎ 8:00 AM - 5:00 PM

Tuesday, March 22

☎ 8:30 AM - 5:00 PM

Wednesday, March 23

☎ 8:30 AM - 12:00 PM

Please call AAAI at 650-328-3123 for further information.

Accommodations

FOR YOUR CONVENIENCE, AAAI has reserved a block of rooms at the hotels listed below. Symposium attendees must contact the hotels directly. Please identify yourself as an AAAI Spring Symposium Series attendee to qualify for the reduced rates.

Creekside Inn

3400 El Camino Real
Palo Alto, CA 94306
Voice: 650-493-2411
or 800-492-7335
Fax: 650-493-6787
Email: czelnis@creekside-inn.com
Marguerite shuttle pick-up: 0.5 mile
Rates: \$139 (S), \$149 (D)
Reserve before: February 21, 2005

Sheraton Palo Alto

625 El Camino Real
Palo Alto, CA 94301
Voice: 650-328-2800
or 800-874-3516
Fax: 650-327-7362
E-mail: SheratonReservation@pahotel.com
Please refer to American Association
for Artificial Intelligence.
Marguerite shuttle stop nearby
Rate: \$169 (S/D)
Reserve before: February 18, 2005

Stanford Terrace Inn

531 Stanford Ave
Palo Alto, CA 94306
Voice: 650-857-0333
or 800-729-0332
Fax: 650-857-0343
E-mail: reservations@stanfordterraceinn.com
Please refer to Group number 94603.
Stanford Terrace Shuttle available with advance notice. Marguerite shuttle stop nearby.
Rates: \$139 (S), \$149 (D)
Reserve before: February 21, 2005

Other Hotels

(Available only on a first-come, first served basis; all prices are subject to changes without notice).

The Red Cottage

1704 El Camino
Menlo Park, CA 94025
Voice: 650-326-9010
Fax: 650-326-4002
Rates: \$85-95 (S) or (D)

Day's Inn Motel

4238 El Camino
Palo Alto, CA 94306
Voice: 650-493-4222
Fax: 650-494-6112
Marguerite shuttle stop nearby
Rates: \$69-79 (S) or (D)

Mermaid Inn

727 El Camino Real
Menlo Park, CA 94025
Voice: 650-323-9481
Fax: 650-323-0662
Rates: \$76 and up (S) or (D)

Disclaimer

In offering the Creekside Inn, the Sheraton Palo Alto, and the Stanford Terrace Inn (hereinafter referred to as "Suppliers") and all other service providers for the AAAI Spring Symposium Series, the American Association for Artificial Intelligence acts only in the capacity of agent for the Suppliers, which are the providers 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.

THIS INFORMATION is the best available at time of printing. Fares and routes change frequently. Please check by telephoning the appropriate numbers below for the most up-to-date information.

South Bay Shuttle

Van service from San Francisco Airport to Palo Alto is \$25 for one person one way. The fare from San Jose Airport to Palo Alto is \$30. Cash or checks only. For reservations call 408-559-9477 or 800-548-4664.

SuperShuttle

Twenty-four hour van service to and from San Francisco to Palo Alto. The fare from San Francisco Airport to Palo Alto is \$26 per person one way plus \$8 per additional passenger. Cash or major credit cards only. For reservations call 415-558-8500 or 800-258-3826 (outside California). Reservations can also be made over the web at www.supershuttle.com

Airport Connection

Service is \$58 from San Francisco Airport to Palo Alto. The fare from San Jose Airport to Palo Alto is \$78. Cash, major credit cards, or checks accepted. Call 888-990-5466 for reservations. White courtesy telephone available at San Francisco Airport.

Stanford Shuttle

The Stanford University Marguerite Shuttle Bus service provides service from several points along El Camino Real, the train station, and other surrounding locations to the Stanford Oval as well as transportation around the Stanford Campus.

Train

CalTrain runs between San Francisco and Palo Alto station starting at 5:00 AM with the last train leaving San Francisco at 11:59 PM (weekdays). The fare is \$8.50 round trip or \$4.25 one way. For up-to-date fare information and timetables, call toll free 800-660-4287.


Parking

Special symposium parking will be available at the Galvez lot on the Stanford campus from March 21-23, at a cost of \$10.00 for all three days. Please indicate on the symposium registration

form if you would like a parking permit. The permit will be mailed to you with your registration receipt, along with a map and directions to the assigned parking areas. Please note that parking permits are valid only in designated areas.

If you park in the SSS-05 designated parking lot, you will need to take the campus shuttle (Marguerite) to the Spring Symposium registration area and sessions. Please allow an extra thirty minutes travel time in your schedule for the shuttle.

Registration Form
AAAI 2005 Spring Symposium Series

ALL ATTENDEES MUST PREREGISTER  Please complete in full and return to AAAI, postmarked by February 11, 2005 (invited attendees) or by February 25, 2005 (general registration). The fee includes attendance at one symposium, a copy of the symposium notes, and the reception.

Please print or type:

First Name _____ Last Name _____

Company or Affiliation _____

Address _____ Home or Business

City _____ State _____

Zip or Postal Code _____ Country _____

Daytime Telephone _____ E-mail Address _____

Symposium

(Please check only one)

- 1. AI Technologies for Homeland Security
- 2. Challenges to Decision Support in a Changing World
- 3. Developmental Robotics
- 4. Dialogical Robots: Verbal Interaction with Embodied Agents and Situated Devices
- 5. Knowledge Collection from Volunteer Contributors
- 6. Metacognition in Computation
- 7. Persistent Assistants: Living and Working with AI
- 8. Reasoning with Mental and External Diagrams: Computational Modeling and Spatial Assistance

Registration Fee

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

Member: \$ 240.00 Nonmember: \$ 395.00 Student Member \$ 105.00 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: \$ 335.00 Student Member (US Canada) \$ 140.00
- Regular (International) Member \$ 375.00 Student Member (International): \$ 180.00
- Temporary Stanford University Parking Permit (March 21–23): \$10.00

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

Credit card number _____ Expiration date _____

Name *(as it appears on card)* _____ Signature _____

Please mail your check to AAAI SSS-05 Symposium Series • 445 Burgess Drive • Menlo Park, CA 94025 or fax with credit card information to 650-321-4457. *Please Note:* Registration cannot be processed if information is incomplete or illegible. Requests for refunds must be received in writing by March 4, 2005. 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!