



**AAAI 1999**

**Fall Symposium Series  
Registration Brochure**

*November 5-7, 1999*

*Sea Crest Oceanfront Resort & Conference Center  
North Falmouth, Massachusetts*

*Sponsored by the*  
American Association for Artificial Intelligence  
445 Burgess Drive, Menlo Park, CA 94025  
(650) 328-3123  
fss@aaai.org • [www.aaai.org/Symposia/Fall/](http://www.aaai.org/Symposia/Fall/)

AAAI presents the 1999 Fall Symposium Series to be held Friday through Sunday, November 5–7, 1999 at the Sea Crest Oceanfront Resort & Conference Center. The topics of the five symposia in the 1999 Fall Symposium Series are:

- Modal and Temporal Logics Based Planning for Open Networked Multimedia Systems
- Narrative Intelligence
- Psychological Models of Communication in Collaborative Systems
- Question Answering Systems
- Using Layout for the Generation, Understanding or Retrieval of Documents

The highlights of each symposium will be presented at a special plenary session. Working 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:

- 1999 Fall Symposium Series  
AAAI  
445 Burgess Drive  
Menlo Park, CA 94025  
Telephone: 650-328-3123\*  
Fax: 650-321-4457\*  
E-mail: fss@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.

This document is also available at <http://www.aaai.org/Symposia/Fall/1999/>.

## **Tentative Program Schedule**

*(subject to change)*

### **Friday, November 5**

9:00 AM – 5:30 PM: Symposia sessions

6:00 PM – 7:00 PM: Reception

### **Saturday, November 6**

9:00 AM – 5:30 PM: Symposia sessions

6:00 PM – 7:00 PM: Plenary session

### **Sunday, November 7**

9:00 AM – 12:30 PM: Symposia sessions

Registration will be located in the lobby of the Conference Center.

# Modal and Temporal Logics Based Planning for Open Networked Multimedia Systems

**I**ntelligent and interactive multimedia applications present new challenges to distributed systems. There's a need for adaptive communication structures with dynamic provision of quality of services and management; a need for an information model of design centered around user needs and participation, with a deeper conception of interaction; and a need to tailor systems to existing practice, to support temporal adaptation and evolution, to accommodate differences in individual styles, organizational roles, and work processes. To meet these challenges, interactive multimedia systems should possess and utilize knowledge about the application domain, user requirements tasks, the context of interaction, the content of stored information, communication and performance parameters. The design of interactive multimedia applications must move away from a view of fixed "black-box" systems, which could be objectively studied and assessed, towards a new view of reflective "systems-in-use," which acknowledges the influence of these elements.

Modal and temporal logics are suitable as the basis of reflective architectures for knowledge-based, multi-agent systems. In AI, they are used to reason about time, action, and adaptive change in systems with components that contain different and dynamic knowledge theories. In classical computer science, they are used for the programming and verifi-

cation of computer programs, especially those concerned with imperative and reactive behavior. In this symposium we are interested in both approaches, aiming to support reflective, reactive, adaptive, distributed, multimedia systems and future generation of intelligent networks.

The primary objective of the symposium is to provide a forum for researchers involved in the application of modal/temporal topics to adaptive/reactive systems and in the design and development of networked multimedia systems and to identify common ground, relevant experiences, applications, open problems and possible future developments and standardization.

For further information see <http://www.cs.toronto.edu/DCS/events.html>.

## **Organizing Committee**

Fawzi Daoud, University of Toronto (Chair); Elisabeth Andre, DFKI GmbH; Lynne Blair, Lancaster University; Glenn Bruns, Bell Labs; Enrico Franconi, University of Manchester; Henry Kautz, AT&T Labs; Luciano Serafini, IRST; Hideaki Takeda, NAIST

# Narrative Intelligence

While narrative has long been a theme in AI, it has recently experienced a surge of popularity. Researchers in various subfields, including story generation and understanding, agent architecture, and interface agents, have taken independent forays into narrative, finding it a fruitful way to rethink some basic issues in AI. Strands of work in narrative intelligence (NI) include the following:

*Models of human narrative cognition:* Since narrative is an important part of the way humans understand the world and each other, some researchers are looking at ways in which artificial agents can have similar narrative capabilities.

*Architectures for generating narratively understandable behavior:* Some researchers are building story-telling systems, interactive fiction architectures, and autonomous agents and interface agents, which can generate narratively structured behavior.

*Meta-studies of narrative as part of AI research:* AI researchers, being human, themselves use narrative to understand their own work. An understanding of this narrative process can improve the quality and social applicability of AI technology.

Researchers in NI have drawn from many research traditions, including art, literary theory, (narrative) psychology, and cultural studies. The goal for this symposium is to bring researchers from these disparate perspectives together to talk

about what we have learned about narrative and its potential for AI.

Within AI, this symposium includes work in areas such as story understanding, story generation, interactive drama, narrative structure in interface design, narrative structure in the design of autonomous agents, believable agents (insofar as they participate in narrative structure), and interactive story-telling. In addition, because NI researchers have drawn deep inspiration from concepts of narrative from other disciplines, we will broaden and solidify our understanding of narrative by including several participants from other research traditions, including narrative theory, art, and cultural studies.

More information about this symposium can be found at <http://www.cs.cmu.edu/~michaelm/narrative.html>

## Organizing Committee

Michael Mateas (Cochair), Carnegie Mellon University Department of Computer Science; Phoebe Sengers (Cochair), Center for Art and Media Technology (ZKM) and German National Research Center for Information Technology (GMD); Kerstin Dautenhahn, University of Reading Department of Cybernetics; Clark Elliott, DePaul University Institute for Applied Artificial Intelligence; James Lester, North Carolina State University Department of Computer Science; Chrystopher Nehaniv, University of Hertfordshire Interactive Systems Engineering

# Psychological Models of Communication in Collaborative Systems

**M**any collaborative systems embody ideas drawn piecemeal from researchers' intuitions about collaboration. Alternatively, collaborative systems may benefit from a more theoretical approach informed by the psychology of communication. Psychological theories and principles (e.g., those of Herbert Clark and colleagues) address many of the same issues that are crucial to the functioning of collaborative systems and agents. Some systems and agents have been designed taking such psychological principles explicitly into account, often adapting and extending the principles. Other systems designed without an explicit psychological theory in mind nevertheless have psychological claims implicit in their function and design choices.

This interdisciplinary symposium will focus on the use and applicability of psychological models of communication in computer systems that function either as a collaborative partner with a human user or as a mediator between collaborating people. A primary thread of the symposium will be to investigate the extent to which specific psychological theories yield useful models for dialogs "with and through computers." Such models may provide architectures for integrating the actions of two or more agents into a coherent whole, methods for interpreting or generating interactive behavior, and theoretical frameworks for coding, understand-

ing, predicting, or evaluating dialogs.

For more details, see <http://www.inria.fr/acacia/PM> (Europe) or <http://www.cs.umd.edu/~traum/PM/> (USA).

## Organizing Committee

Susan E. Brennan (Cochair), SUNY Stony Brook; Alain Giboin (Cochair), INRIA; David Traum (Cochair), University of Maryland; Johanna Moore, University of Edinburgh; David G. Novick, EURISCO; Michael F. Schober, New School for Social Research; Steve Whittaker, AT&T.

# Question Answering Systems

Since the days of the “Turing Test,” “question answering” (QA) has been a powerful paradigm in AI. Even though AI has diversified much beyond the notion of intelligent behavior proposed in the Turing test, QA remains a fundamental capability needed by a large class of systems. In addition, it is a powerful methodological tool to structure a task and specify its scope using a question grammar. The QA paradigm extends beyond AI systems to query processing in database systems, and many analytical tasks that involve gathering, correlating, and analyzing information can naturally be formulated as QA problems. In addition, with the recent explosion of information available on the worldwide web, QA is a compelling framework for finding information that closely matches user needs.

The symposium is aimed at bringing together diverse techniques from AI (more specifically, knowledge representation and reasoning) and database systems (more specifically, query processing) that can be used to build QA systems. The specific topics covered will include knowledge bases and ontologies for question answering systems, inference and query processing techniques, and performance evaluation methodologies.

The symposium will feature invited talks by George Miller (Princeton University) and Bill Woods (Sun Labs). Additional invited talks are being planned. Evaluation of question

answering systems will be a strong focus at the symposium. The symposium will feature a panel discussion on evaluating the semantic complexity of a question answering task. In addition, there will be presentations on recent government and industry sponsored evaluations such as TREC (Text Retrieval Conference), ATIS (Air Travel Information System), TIPSTER, HPKB (High Performance Knowledge Bases), and database benchmarking.

For the latest information on the symposium technical program, please see <http://www.ai.sri.com/qa.html>.

## Organizing Committee

Vinay K. Chaudhri (Cochair), SRI International; Richard Fikes (Cochair), Stanford University; Paul Cohen, University of Massachusetts at Amherst; Michael Franklin, University of Maryland at College Park; Boris Katz, Massachusetts Institute of Technology; Bart Selman, Cornell University

# Using Layout for the Generation, Understanding or Retrieval of Documents

This symposium will bring together academic researchers exploring computational treatments of layout as a feature of text, and practitioners of information design where layout plays a major role. The participants reflect a range of areas within linguistics and computer science in which layout can be studied and used.

The symposium will have four main sessions centered on the key themes of the workshop. The opening session will explore the general significance of layout in written language. The program includes contributions from people who are active in commercial document production as well as theoretical research. We will discuss practical issues of document design, the relationship between layout and genre, and research on the ways in which layout can influence text comprehension.

The focus then turns to the role of layout in natural language generation. Since layout and wording interact, it is desirable that a system, which automatically generates documents, should include layout specifications in its output. We will discuss specific interactions between graphical and linguistic features, and how these affect the architecture of the system and the nature of text planning.

The third session considers the converse problem of exploiting layout features during information extraction. Because layout often expresses semantic or rhetorical distinctions, a

system that automatically extracts data from a document can be enhanced by taking account of graphical features, even perhaps superficial ones. We will discuss examples like table recognition, use of indenting, and the role of formatting in identifying key words.

In the fourth session we discuss systems that utilize rhetorical markup in order to perform automatic document formatting. We will focus in particular on the important empirical problem of discovering the relationship between rhetorical structure and layout in specific genres and domains.

A further session will consist of on-line demonstrations of state-of-the-art computational systems performing tasks such as automatic formatting, generation of formatted texts and the retrieval of information from documents based on layout features. Poster presentations of work-in-progress in new, emerging areas will also be included. At least half of the time of the symposium will be devoted to discussion.

For more information, see <http://www.itri.brighton.ac.uk/events/aaai-cfp/AAAI-CFP.html>.

## Organizing Committee

John Carroll, University of Sussex; Robert Dale, Microsoft Research Institute; Winfried Graf, Kienbaum Management Consultants GmbH; Matthew Hurst, University of Edinburgh; Geoff Nunberg, Xerox PARC; Richard Power (Co-chair), University of Brighton; Donia Scott (Co-chair), University of Brighton; Karen Sparck Jones, Cambridge University.

# Registration and 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 September 8, 1999. After that period, registration will be opened up to the general membership of AAAI and other interested parties. All registrations must be postmarked by September 22, 1999.

The conference registration fee includes admission to one symposium, one copy of the working notes for that symposium, a continental breakfast each morning, lunch Friday and Saturday, coffee breaks, and the opening 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 1999 Fall Symposium Series  
445 Burgess Drive  
Menlo Park, CA 94025

If you are paying by credit card, you may email the form to [fss@aaai.org](mailto:fss@aaai.org) or fax it to 650-321-4457. Registration forms are also available on AAAI's web page: <http://www.aaai.org/Symposia/Fall/fssregform.html> (or [fssregform.pdf](#)).

*Please note:* All refund requests must be in writing and postmarked by October 5, 1999. No refunds will be

granted after this date. A \$25.00 processing fee will be levied on all refunds granted.

When you arrive at the Sea Crest Resort, please pick up your complete registration packet at the registration area in the lobby of the Conference Center.

## Registration Hours

Registration hours will be:

**Thursday, November 4**

7:00 PM – 8:30 PM

**Friday, November 5**

8:00 AM – 5:00 PM

**Saturday, November 6**

8:00 AM – 5:00 PM

**Sunday, November 7**

8:00 AM – 12:00 PM

## Accommodations

For your convenience, AAAI has reserved a block of rooms at Sea Crest. The rate is \$79.00 plus tax for a single or double room. Symposium attendees must contact Sea Crest directly. Please request the group rate for AAAI's Fall Symposium Series when reserving your room. The cut-off date for reservations is October 5, 1999. Reservations after this date will be accepted based on availability at the negotiated group rate. All reservations must be secured by one night's deposit per room, via credit card or check. If an individual reservation is cancelled eight days or more prior to



arrival, the deposit is refunded, less a \$10.00 service charge. If an individual reservation is cancelled seven days or less prior to arrival, or does not arrive on the specified dates, the reservation is cancelled for all nights, and the deposit will be forfeited.

**Sea Crest Oceanfront Resort & Conference Center**

Old Silver Beach on Cape Cod  
350 Quaker Road  
North Falmouth, MA 02556-2943  
*Group Reservations:* 800-225-3110 or  
508-540-9400  
*Fax:* 508-540-7602

**Air Transportation and Car Rental**

Get there for less when you call our official travel agency, Conventions in America (CIA) at 1-800-929-4242 and ask for Group #428. You will receive 5%-10% off the lowest applicable fares on American Airlines, or the lowest available fare on any other carrier. Take an additional 5% off if you purchase at least 60 days prior to departure. Travel between November 2-10, 1999. All customers of CIA also receive free flight insurance of \$100,000. Avis Rent A Car is offering special low conference rates with unlimited free mileage. Reservation hours: M-F 6:30 AM-5:00 PM PDT. Outside US and Canada, call 619-232-4298 or fax 619-232-6497. Website: [www.scitravel.com](http://www.scitravel.com) (use #428). E-mail: [flycia@scitravel.com](mailto:flycia@scitravel.com). If you call direct, refer to these codes:

- *American:* 1-800-433-1790, Index #11398
- *Avis:* 1-800-331-1600, AWD #J948900

**Parking**

Parking is available at the Sea Crest Resort at no charge for the duration of your stay.

**Arrival by Air**

The Sea Crest Resort is approximately one hour and fifty minutes by car from T. F. Green Airport in Warwick, Rhode Island and approximately one hour and forty minutes from Logan International Airport in Boston, MA. There are frequent connecting flights to Hyannis from Boston, Newark, and New York City.

**Ground Transportation**

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.

**Transportation from Airport**

Sea Crest Resort recommends Bonanza Bus, which provides regular transportation between Falmouth and Logan Airport in Boston, MA. The fare is \$19 one way and \$33.95 round trip. No reservations are necessary. Bonanza Bus stops at all Logan airport terminals, making eight round trips daily. Contact Bonanza Bus at 508-548-7588. Sea Crest Resort does not

recommend taking public transportation from Rhode Island due to multiple stops and transfers.

**Taxi**

Taxi's are readily available in Falmouth for transportation to Sea Crest Resort. The approximate fare is \$14.00 one way.

**Arrival by Car**

*From Metropolitan Boston area:* Southeast Expressway to Route 3, take first exit on rotary at Sagamore Bridge to Route 6 West, take first exit at Bourne Bridge rotary to Route 28 (Falmouth and the Islands), to Bourne Bridge over Cape Cod Canal.

*From Points North and West of Boston:* Take Interstate 495 South, Route 25 South to Bourne Bridge over Cape Cod Canal.

*From Providence and New York:* Take Interstate 95 to Providence, Interstate 195 East from Providence to Route 25 South to Bourne Bridge over Cape Cod Canal.

*From Bourne Bridge and Cape Cod Canal:* Take Route 28 (Falmouth and the Islands) to Route 151 exit, left at bottom of exit ramp, left at traffic signals (Route 28A South) one mile to rotary, take first exit than 1 mile to Sea Crest.

**Disclaimer**

In offering the Sea Crest Resort and Conference Center, American Airlines, Avis Rent A Car (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 1999 AAAI Fall Symposium Series

**A**LL ATTENDEES MUST PREREGISTER  
Please complete in full and return to AAAI, postmarked by September 8, 1999 (invited attendees) or by September 22, 1999 (general registration). *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. Modal and Temporal Logics Based Planning...
- 2. Narrative Intelligence
- 3. Psychological Models of Communication in Collaborative Systems
- 4. Question Answering Systems
- 5. Using Layout for the Generation, Understanding, or Retrieval of Documents

## Fee

Member: \$ 230.00       Nonmember: \$ 290.00

Student Member \$ 110.00     Nonmember student: \$ 135.00

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

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

## Method of Payment

*(All e-mail and fax registrations must be accompanied by credit card information.*

**Prepayment is required. No PO's will be accepted.**) *(please circle one)*

AMERICAN EXPRESS    MASTERCARD    VISA    CHECK    MONEY ORDER

Credit card number \_\_\_\_\_ Expiration date \_\_\_\_\_

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

Signature \_\_\_\_\_

Thank you for your registration! Please mail completed form with your payment to:

AAAI Fall 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 October 5, 1999. No refunds will be granted after this date. A \$25.00 processing fee will be levied on all refunds granted.

## For Office Use Only

Check Number \_\_\_\_\_ Amount \_\_\_\_\_ Received \_\_\_\_\_