Second Call for Papers: IAT-2001

The 2nd Asia-Pacific Conference on Intelligent Agent Technology

Maebashi TERRSA, Maebashi City, Japan, October 23-26, 2001

Home Page: http://kis.maebashi-it.ac.jp/iat01

IAT-2001 will be jointly held with
The First Asia-Pacific Conference on Web Intelligence (WI-2001)

IAT-2001 and WI-2001 Joint Keynote Speakers:
Benjamin Wah (IEEE Computer Society President), University of Illinois
Edward A. Feigenbaum (Turing Award Winner), Stanford University

IAT-2001 Invited Speakers:
Toyoaki Nishida (University of Tokyo, Japan)
Zbigniew W. Ras (University of North Carolina, USA)
Andrzej Skowron (Warsaw University, Poland)
Katia Sycara (Carnegie Mellon University, USA)

The Asia-Pacific Conference on Intelligent Agent Technology (IAT) is a high-quality, high-impact biennial agent conference series. The second meeting in this conference series follows the success of IAT'99 held in Hong Kong in 1999. IAT-2001 will primarily focus on (i) the state-of-the-art in the development of intelligent agents and (ii) the theoretical and computational foundations of intelligent agent technology. The aim of IAT-2001 is to bring together researchers and practitioners from diverse fields, such as computer science, information technology, business, education, human factors, systems engineering, and robotics to (i) examine the design principles and performance characteristics of various approaches in intelligent agent technology, and (ii) increase the cross-fertilization of ideas on the development of autonomous agents and multiagent systems among different domains. By encouraging idea-sharing and discussions on the underlying logical, cognitive, physical, and biological foundations as well as the enabling technologies of intelligent agents, IAT-2001 is expected to stimulate the future development of new models, new methodologies, and new tools for building a variety of embodiments of agent-based systems.

High quality papers in all IAT related areas are solicited. Papers exploring new directions will receive a careful and supportive review. In addition to technical paper sessions, IAT-2001 will also include a collection of invited talks from internationally respected speakers, and system demonstrations. The technical issues to be addressed include, but not limited to:

- **Agent-Based Applications:** **D**ata and knowledge intensive domains (e.g., large databases, Internet, digital libraries, distributed decision making, financial modeling and engineering, business information systems and process automation). **S**oftware and interface agents (e.g., personal assistant, translator, scheduler, information filter, tutor). **C**omputational intelligence (e.g., pattern analysis and recognition, imaging, optimization, resource allocation, constraint satisfaction, planning). **A**gents in e-commerce and e-business. **A**utonomous agents in science and engineering (e.g. aerospace, survey of the seabed and space). **P**hysically embodied systems (e.g., autonomous robots and groups). **V**ery-large, complex, integrated intelligent systems.
- **Computational Architecture and Infrastructure:** **C**omputational architectures. **O**ntology models. **A**gent-level and multi-agent-level infrastructure. **C**ommunication languages. **M**ulti-modal systems and interfaces. **P**rotocols. **T**ools and standards. **H**eterogeneity and interoperability. **S**calability.
- **Learning and Adaptation:** **S**oft-computing in multi-agent systems. **U**ncertainty management in multi-agent systems. **I**ntegrated exploration and exploitation. **L**ong-term reliability. **N**eural networks. **A**rtificial life. **B**ehavioral selection. **C**oordinating perception, thought, and action. **B**ehavioral self-organization. **B**elievable lifelike quality. **C**lassifier systems. **E**volution and learning in dynamic environments. **A**daptation and self-adaptation. **E**mergent behavior. **E**volutionary computation.
- **Data and Knowledge Engineering/Communication:** **I**nformation filtering. **D**ata mining. **H**eterogeneous data integration and management. **H**uman-agent interaction. **K**nowledge discovery. **K**nowledge sharing. **K**nowledge aggregation. **R**easoning and planning. **A**daptation and evolution of knowledge networks. **D**istributed knowledge systems.
- **Distributed Intelligence:** **D**ynamics of groups and populations. **S**warms. **P**opulation evolution. **C**oevolution. **C**ollective group behavior. **C**oordination and cooperation. **D**istributed intelligence. **S**ocial integration. **M**arket-based computing.
- **Formal Theories of Agents:** **F**ormal/computational modeling. **C**haotic and fractal dynamics. **C**omputational complexity. **E**fficiency in distributed systems. **T**axonomy of agent environments. **C**lassification and characterization of complex behaviors. **T**heories of perception, rationality, intention, emotion. **C**oordination, action, and social behaviors.

High quality full-length papers in all IAT related areas are solicited. Papers exploring new directions are most welcome and will receive a careful and supportive review. All submitted papers will be reviewed on the basis of technical quality, relevance, significance, and clarity. Accepted papers will be published in the conference proceedings by World Scientific, An International Publisher, as a hardcover book. A selected number of IAT-2001 accepted papers will be expanded and revised for inclusion in "Knowledge and Information Systems: An International Journal" by Springer-Verlag and in "International Journal of Pattern Recognition and Artificial Intelligence" by World Scientific. IAT best paper award will be conferred on the author(s) of the best papers at the conference.

Electronic submission is encouraged and preferred. Please send LaTex (MS-Words, or PDF) and PostScript versions of your paper, and an ASCII version of the cover page (in separate email), by March 20, 2001 to:

iat01@maebashi-it.ac.jp

Four (4) hardcopies of the paper by regular mail are also requested if electronic submission is not possible. Please send hardcopies of your paper by March 20, 2001 to:

Prof. Ning Zhong (IAT-2001)
Department of Information Engineering
Maebashi Institute of Technology
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Tel&Fax: +81-27-265-7366
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IAT-2001 also welcomes submissions of research projects, research prototypes, experimental systems, and commercial products for demonstrations at the conference. Each submission should include a title page containing a title, a 200-300 word abstract, a list of keywords, the names, mailing addresses, and Email addresses of the presenters, and a two-page description of the demo system. Submissions should reach the IAT-2001 Demo Chair:

Dr. Jianchang Mao (IAT-2001)
Verity Inc.
894 Ross Drive
Sunnyvale CA 94089, USA
E-mail: jmao@verity.com

by July 2, 2001. IAT best demo award will be conferred on the author(s) of the best demos at the conference.

Paper submission deadline:	*March 20, 2001*	*Demo submission due by:*	*July 2, 2001*
Notification of paper acceptance:	*May 20, 2001*	*Notification of demo acceptance:*	*August 3, 2001*
Camera-ready of accepted papers due by:	*June 20, 2001*	*Conference:*	*October 23-26, 2001*

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See http://kis.maebashi-it.ac.jp/iat01

Please send suggestions and inquiries regarding IAT-2001 to:

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