

# The Innovative Applications of Artificial Intelligence Conference

Sponsored by the American Association for Artificial Intelligence  
In cooperation with IJCAI, Inc.

Jan Aikins, Xerox Corporation, IAAI-95 Program Chair  
Howard Shrobe, Massachusetts Institute of Technology, IAAI-95 Cochair

## IAAI-95 Program Committee:

Bruce Buchanan, *University of Pittsburgh* (USA)  
Elizabeth Byrnes, *Bankers Trust Company* (USA)  
Marc Eisenstadt, *Knowledge Media Institute* (United Kingdom)  
Philip Klahr, *Inference Corporation* (USA)  
Alain Rappaport, *Neuron Data* (USA)  
Earl Sacerdoti, *Apple Computer* (USA)  
Herb Schorr, *USC/Information Science Institute* (USA)  
Ted Senator, *US Department of the Treasury* (USA)  
Reid Smith, *Schlumberger Cambridge Research* (United Kingdom)

## IAAI-95 Schedule

All IAAI-95 sessions will be held in Room 407C, fourth level, Palais des Congrès de Montréal.

### Monday, August 21

- |                     |   |
|---------------------|---|
| 8:45 – 9:00 AM      | <b>Opening Remarks</b><br><i>Jan Aikins (Program Chair), Xerox Corporation</i>  |
| 9:00 – 10:30 AM     | <b>Invited Panel: AI in the Capital Markets</b><br><i>Organized by Ganesh Mani, LBS Capital Management, Inc.</i><br><i>Panelists: Yaser Abu-Mostafa, Caltech; Steven L. Armentrout, University of Maryland; Steve Ward, Ward Systems Group; and Hal White, University of California, San Diego.</i> |
| 10:30 – 10:50 AM    | Break   |
| 10:50 AM – 12:50 PM | <b>Session: Finance</b><br><i>Session Chair: Jan Aikins</i>   |
| 10:50 – 11:20 AM    | The GE Compliance Checker: A Generic Tool for Assessing Mortgage Loan Resale Requirements<br><i>Sue Bynum, Robert Noble, and Cheri Todd, GE Capital Mortgage Corporation; Ben Bloom, Brightware, Inc.</i>   |
| 11:20 – 11:50 AM    | GENIUS: Combining Knowledge Engineering and Machine Learning to Achieve Balanced Risk Assessment<br><i>David C. Golibersuch, GE Corporate Research and Development; Rebecca Towne and Cheryl Wiebe, GE Capital Mortgage Corporation</i>   |
| 11:50 AM – 12:20 PM | The FinCEN Artificial Intelligence System (FAIS)<br><i>Ted E. Senator, Henry G. Goldberg, Jerry Wooton, Matthew A. Cottini, A.F. Umar Khan, Christina D. Klinger, Winston M. Llamas, Michael P. Marrone, and Raphael W.H. Wong, U.S. Department of the Treasury</i>                                 |
| 12:20 – 12:50 PM    | Meet the Authors  |

# IAAI Conference



# IAAI Conference

2:00 – 5:40 PM	<b>Session: Business</b> <i>Session Chair: Bruce Buchanan, University of Pittsburgh</i>
2:00 – 2:30 PM	PCE: Generating Business Plans for New Products <i>Don Palese, International Business Machines and Elizabeth Wall Ralston, Brightware, Inc.</i>
2:30 – 3:00 PM	SAMS: Strategic Account Management System <i>Howard Kleinert, Canon USA, Inc. and Raj Rao, Brightware, Inc.</i>
3:00 – 3:30 PM	Experience with the Development and Deployment of Expert Systems in Agriculture <i>Ahmed A. Rafea, Sayed El-Azhari, Iman Ibrahim, Soliman Edres, and Mostafa Mahmoud, Ministry of Agriculture and Land Reclamation, Egypt</i>
3:30 – 3:50 PM	Break
3:50 – 5:20 PM	<b>Invited Panel: Using Computation to Enhance Democracy</b> <i>Moderator: Randall Davis, Massachusetts Institute of Technology</i> <i>Panelists: Howard E. Shrobe, ARPA/MIT, others TBA</i>
5:20 – 5:40 PM	Meet the Authors
6:30 – 9:00 PM	<b>IJCAI-95 Opening Ceremony and Reception</b> Room 611, Sixth floor, Palais des Congrès de Montréal

## Tuesday, August 22

9:00 – 10:00 AM	<b>Invited Talk: Image-Guided Brain Surgery</b> <i>Eric Grimson, Massachusetts Institute of Technology</i> <i>Introduction by Howard E. Shrobe, ARPA/MIT</i>
10:00 – 10:20 AM	Break
10:20 – 12:10 PM	<b>Session: Transportation/Scheduling</b> <i>Session Chair: Philip A. Klahr, Inference Corporation</i>
10:20 – 10:50 AM	Scheduling of Marine Resources in the Port of Singapore Authority: A Total Approach <i>Goh Kwong Heng, Goh Kah Seng, Lye Chee Whye, Tan Puay Hwa, and Tay Eng Kiang, Port of Singapore Authority</i>
10:50 – 11:20 AM	EPO: A Knowledge Based System for Wood Procurement Management <i>Seppo Linnainmaa, Juha Savola and Olli Jokinen, VTT Information Technology, Finland</i>
11:20 – 11:50 AM	DAS: Intelligent Scheduling Systems for Shipbuilding <i>Jae Kyu Lee and Kyoung Jun Lee, Korea Advanced Institute of Science and Technology; Eun Young Kim, Daewoo Heavy Industries Ltd.</i>
11:50 AM – 12:10 PM	Meet the Authors
2:00 – 3:30 PM	<b>Invited Panel: SIMNET (Intelligent Simulation in the Military)</b> <i>Moderator: Paul Rosenbloom, University of Southern California/Information Sciences Institute</i> <i>Panelists: Randy Garrett, Advanced Research Projects Agency; Dennis McBride, Naval Research Laboratory; David Y. Tseng, Hughes Research Laboratories</i>
3:30 – 3:50 PM	Break
3:50 – 5:40 PM	<b>Session: Military</b> <i>Session Chair: Ted E. Senator, U.S. Department of the Treasury</i>



- 3:50 – 4:20 PM Automated Consultation for the Diagnosis of Interplanetary Telecommunications  
*A. G. Quan, U.M. Schwuttke, J.S. Herstein, and J.S. Spagnuolo, Jet Propulsion Laboratory, California Institute of Technology*
- 4:20 – 4:50 PM Automated Image Processing for Scientific Data Analysis  
*Steve A. Chien and Helen B. Mortensen, Jet Propulsion Laboratory, California Institute of Technology*
- 4:50 – 5:20 PM SABRE  
*William C. Branley, Jr. and Earnest D. Harris, U.S. Army AI Center*
- 5:20 – 5:40 PM Meet the Authors

## Wednesday, August 23

- 9:00 – 10:30 AM **Session: Troubleshooting**  
*Session Chair: Howard E. Shrobe, ARPA/MIT*
- 9:00 – 9:30 AM Development of Self-Maintenance Photocopiers  
*Yoshiki Shimomura and Sadao Tanigawa, Mita Industrial Co. Ltd., Japan; Yasushi Umeda and Tetsuo Tomiyama, The University of Tokyo*
- 9:30 – 10:00 AM AGETS MBR: An Application of Model-Based Reasoning to Gas Turbine Diagnostics  
*Howard A. Winston and Robert T. Clark, United Technologies Research Center; Gene Buchina, United Technologies/Pratt & Whitney Government Engine and Space Propulsion*
- 10:00 – 10:30 AM IMPACT: Development and Deployment Experience of Network Event Correlation Applications  
*Gabriel Jakobson, Mark Weissman and Shri Goyal, GTE Laboratories*
- 10:30 – 10:50 AM Break
- 10:50 – 11:20 AM AutoCell — An Intelligent Cellular Mobile Network Management System  
*Chee-Meng Low and You-Tong Tan, Information Technology Institute, Singapore; Soo-Yong Choo, Sie-Hung Lau and Jin-Tiong Lim, Singapore Telecom*
- 11:20 AM – 12:10 PM **Session: Manufacturing/Design**  
*Session Chair: Howard E. Shrobe, ARPA/MIT*
- 11:20 – 11:50 AM Equation- and Knowledge-Based Generative Gear Design System  
*Karon Barber and Matthew Orel, General Motors Corporation*
- 11:50 AM – 12:10 PM Meet the Authors

