The AAAI-2000 Workshop on

Knowledge-based Electronic Markets

http://www.igec.umbc.edu/kbem/

Monday, July 31, Austin TX, USA

held at the
Seventeenth National Conference on Artificial Intelligence

with support from the
UMBC Institute for Global Electronic Commerce

The AAAI-2000 Workshop on Knowledge-based Electronic Markets will address the challenges, opportunities, and practical applications of knowledge-based electronic markets (emarkets). By emarkets, we mean markets on the Web (or large inter-enterprise private networks) where buyers interact and transact with sellers. emarkets also include infrastructure support and mediation services and players, e.g., for yellow pages, catalogs, shopping search, advertising, sales assistants, brokering, aggregation, infomediaries, reputation and trust management, authentication, and payments. By knowledge-based, we mean using automated techniques for knowledge representation and reasoning, learning, and communication, e.g., in intelligent agents.

Organizing committee

Tim Finin (chair), University of Maryland Baltimore County
Benjamin Grosof (chair), M.I.T. Sloan School of Management
Yannis Labrou, University of Maryland Baltimore County
Leora Morgenstern, IBM T.J. Watson Research Center

Program committee members

Dean Allemang, Synquiry
Adam Cheyer, VerticalNet
Bill Chu, University of North Carolina Charlotte
Mark Fox, University of Toronto
Martin Griss, HP Laboratories
Sverker Janson, SICS
Anupam Joshi, UMBC
Deborah McGuinness, Stanford
Sandra Newton, RHL Consulting
Jeff Rosenschein, The Hebrew University of Jerusalem

Preliminary Schedule

Note: Each presentation should be limited to twenty minutes with ten minutes reserved for questions and discussion.

8:30 - 9:00 Introduction

9:00 - 10:30 Session one: users

Semantic ratings and heuristic similarity for collaborative filtering, Robin Burke, Department of Information and Computer Science, University of California, Irvine

Knowledge Based Recommender Systems Using Explicit User Models, Brendon Towle and Clark Quinn, Knowledge Planet.com

Hybrid Recommender Systems for Electronic Commerce, Thomas Tran and Robin Cohen, Department of Computer Science, University of Waterloo

10:30 - 11:00 Break

11:00 - 12:30 Session two : supply chain management

Agents that represent buyer's interests in E-commerce, Sandip Sen, Partha Sarathi Dutta, & Rajatish Mukherjee Department of Mathematical and Computer Sciences, University of Tulsa.

Know Your Supply Chain, Kurt D. Fenstermacher and Daniel Zeng, Management Information Systems Department, Eller College of Business and Public Administration, University of Arizona

Agent-based Electronic Markets for Project Supply Chain Coordination, Keesoo Kim, Boyd C. Paulson Jr., and Charles J. Petrie Jr., Stanford University.

12:30 - 1:30 Lunch

1:30 - 3:30 Session three: negotiation

Automated Negotiation from Declarative Contract Descriptions, Daniel M. Reeves and Michael P. Wellman, University of Michigan Artificial Intelligence Laboratory; Benjamin N. Grosof and Hoi Y. Chan, IBM T.J. Watson Research Center

Beyond Passive Bids and Asks: Mutual Buyer and Seller Discrimination Through Integrative Negotiation in Agent Based Electronic Markets, Gaurav Tewari and Pattie Maes, MIT Media Laboratory

Negotiating With Experience, Wai Yat Wong, Dong Mei Zhang, and Mustapha Kara-Ali, CSIRO Mathematical and Information Sciences, Australia.

Toward Automated Pricing and Bundling of Information Goods, Christopher H. Brooks and Edmund H. Durfee Artificial Intelligence Laboratory, University of Michigan.

3:30 - 4:00 Break

4:00 - 6:00 Session four: infrastructure

KOJAC: Implementing KQML with Jini to Support Agent-Based Communication in Emarkets, M. Brian Blake, Department of Information and Software Engineering, George Mason University.

Service Discovery in the Future Electronic Market, Harry Chen, Dipanjan Chakraborty, Liang Xu, Anupam Joshi, and Tim Finin, Department of Computer Science and Electrical Engineering, University of Maryland Baltimore County

Towards a marketplace infrastructure for virtual organizations, Alun Preece, University of Aberdeen, Computing Science Department .

Join the Club: Enabling Self-Organizing Groups on the Net, Stephen Fickas (Computer Science), Holly Arrow (Psychology), John Orbell (Political Science), University of Oregon.

6:00 Adjourn