

2003 IEEE/WIC International Conference on Web Intelligence
2003 IEEE/WIC International Conference on Intelligent Agent Technology

Final Program

WI'03 and IAT'03

October 13-16, 2003

Lord Nelson Hotel, Halifax, Canada

Sponsored by:

IEEE Computer Society
Web Intelligence Consortium (WIC)



Welcome Message

Welcome to the 2003 IEEE/WIC International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI'03 and IAT'03). On behalf of the WI'03 and IAT'03 Conference Committees, we would like to thank you for coming to WI'03 and IAT'03, and we hope you will enjoy the conference technical and social programs as well as the beautiful city of Halifax, Canada.

The WI'03 and IAT'03 conferences are sponsored and organized by the IEEE Computer Society Technical Committee on Computational Intelligence (TCCI) and by the Web Intelligence Consortium (WIC).

Web intelligence (WI) is a field of scientific research and development that deals with the fundamental roles and practical impacts of artificial intelligence (AI) and advanced information technology (IT) on the next generation of Web-empowered products, systems, services, and activities. Following the great success of WI'01 held in Maebashi City, Japan, in 2001, WI'03 will provide a leading international forum for researchers and practitioners (1) to present the state-of-the-art WI technologies and (2) to cross-fertilize ideas on the development of Web-based intelligent information systems among different domains.

IAT'03 follows the great success of IAT'99 held in Hong Kong in 1999 and IAT'01 held in Maebashi City, Japan, in 2001. The aim of IAT'03 is to bring together researchers and practitioners from diverse fields, such as artificial intelligence, software engineering, Internet computing, computational sciences, business, and robotics and automation. 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'03 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.

With the strong support of world-renowned researchers and practitioners from the international WI and IAT communities, the IEEE/WIC Joint Conference has received an overwhelming response compared to any other related conferences this year. WI'03 and IAT'03 received 592 submissions (350 for WI'03 and 242 for IAT'03) from over 48 countries and regions.

The submitted full-length papers went through a rigorous reviewing process: Each of the 592 submissions was reviewed by at least two program committee members, and the borderline cases were re-reviewed by additional program committee members and by chair(s). As a result, approximately 16% of the 350 WI'03 submissions were accepted as regular papers and 21% of them were accepted as short papers. For IAT'03, around 24% of the 242 submissions were accepted as regular papers and 21% of them were accepted as short papers.

Any successful, high-quality conference requires enormous effort and the expertise of many committed people. Here, we would like to thank the conference co-chairs (Nick Cercone, Ruqian Lu, and Toyoaki Nishida), program co-chairs (Boi Faltings, Matthias Klusch, and Chunnian Liu), industry track chairs (Jianchang Mao, Yiming Ye, and Lizhu Zhou), workshop chairs (Cory Butz, Zhongzhi Shi, and Yiyu Yao), tutorial chairs (Jeffrey Bradshaw and Jinglong Wu), publicity and Web chair Yiu-Ming Cheung, the WI'03 and IAT'03 conference secretariat (Xiaolong Jin), and all of the members of the WI'03 and IAT'03 program committees as well as appointed reviewers for the countless hours they devoted to the conference organization and review activities. Special thanks go to the IEEE-CS-TCCI chair (Xindong Wu), WIC Advisory Board members (Edward A. Feigenbaum, Setsuo Ohsuga, Benjamin Wah, Philip Yu, and L.A. Zadeh), and WIC Technical Committee & WI/IAT Steering Committee members (Nick Cercone, Dieter Fensel, Georg Gottlob, Lakhmi Jain, W. Lewis Johnson, Jianchang Mao, Hiroshi Motoda, Toyoaki Nishida, Xindong Wu, and Yiyu Yao) for their constant support.

The conference Web support team of WIC did a wonderful job putting together and maintaining the home pages for WI'03 and IAT'03 as well as the Cyber-Chair software, an intelligent agent for conference management and communications among conference organizers, program committee members, and authors/attendees.

Last but not the least, we would like to thank all of the authors of submitted papers and the attendees for their contributions and participation. Without their strong support, we could not have a successful conference.

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WI'03 and IAT'03 Conference Chair
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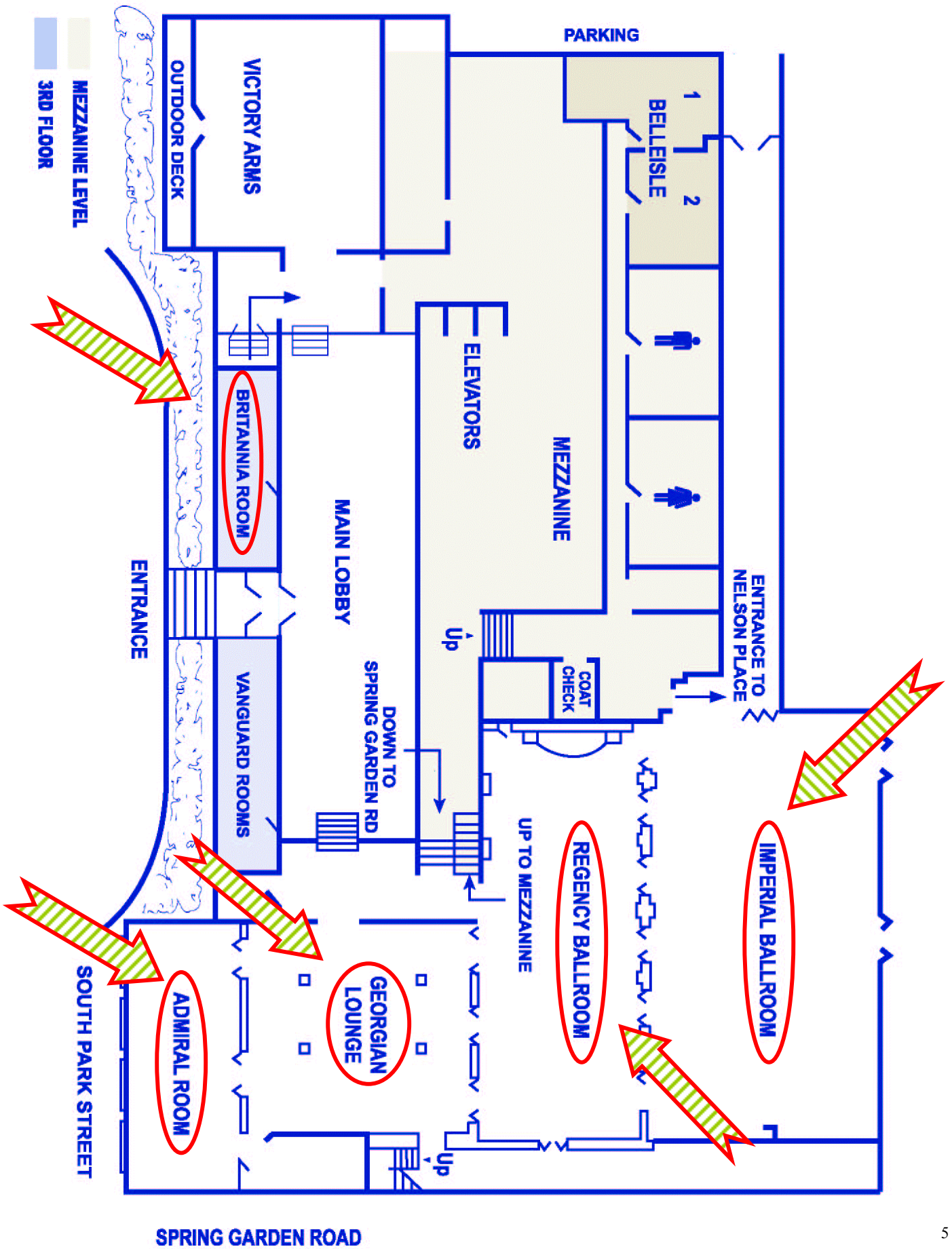
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Program at a Glance

October 13, Monday				
Time	Workshops and Tutorials			
08:30-09:00	Workshop and Tutorial On-site Registration			Georgian Lounge
Venue	Regency Ballroom	Imperial Ballroom	Admiral Room	Britannia Room
09:00-10:15	W1: Knowledge Grid and Grid Intelligence	W2: Applications, Products and Services of Web-Based Support Systems	W3: Collaboration Agents: Autonomous Agents for Collaborative Environments	
10:15-10:30	Coffee Break			
10:30-12:00	W1: Knowledge Grid and Grid Intelligence (Cont.)	W2: Applications, Products and Services of Web-Based Support Systems (Cont.)	W3: Collaboration Agents: Autonomous Agents for Collaborative Environments (Cont.)	
12:00-13:30	Lunch			
13:30-15:30	W1: Knowledge Grid and Grid Intelligence (Cont.)	W2: Applications, Products and Services of Web-Based Support Systems (Cont.)	W3: Collaboration Agents: Autonomous Agents for Collaborative Environments (Cont.)	T1: A Glimpse at the Future of Agent Technology Jeffrey M. Bradshaw
15:30-15:40	Coffee Break			
15:40-17:40	W1: Knowledge Grid and Grid Intelligence (Cont.)	W2: Applications, Products and Services of Web-Based Support Systems (Cont.)	W3: Collaboration Agents: Autonomous Agents for Collaborative Environments (Cont.)	T2: Adaptive Web-Based Systems: Technologies and Examples Peter Brusilovsky
16:00-18:30	Conference On-Site Registration			Georgian Lounge
October 14, Tuesday				
Time	Sessions			
08:00-08:50	Conference On-Site Registration			Georgian Lounge
08:50-09:00	Opening Address			Imperial Ballroom
09:00-09:45	Invited Talk 1 (Chair: Nick Cercone): "Mining and Monitoring Data Streams", Dr. Philip S. Yu			Imperial Ballroom
09:45-10:30	Invited Talk 2 (Chair: Boi Faltings): "Reasoning about Cooperation", Prof. Michael Wooldridge			Imperial Ballroom
10:30-10:50	Coffee Break			
Venue	Regency Ballroom	Admiral Room		Imperial Ballroom
10:50-12:20 (90)	Session 1A (IAT): (Chair: Jesus Favela) Agent Behaviors and Reinforcement Learning (1)	Session 1B (WI): (Chair: Chunnian Liu) Web Mining and Data Engineering (1)		Session 1C (WI): (Chair: Jiming Liu) Web Topology and Social Networks (1)
12:20-13:20	Lunch			
13:20-15:00 (100)	Session 2A (IAT): (Chair: Boi Faltings) Distributed Problem Solving	Session 2B (IAT): (Chair: Shahram Rahimi) Task-Oriented Agents		Session 2C (WI): (Chair: Y. Y. Yao) Web Prefetching
15:00-15:10	Break			
15:10-16:50 (100)	Session 3A (IAT): (Chair: Jiming Liu) Autonomy-Oriented Computing (AOC)	Session 3B (IAT): (Chair: Jeffery M. Bradshaw) Autonomous Pricing and Negotiation (1)		Session 3C (WI): (Chair: Yiming Ye) Ontology Engineering (1)
16:50-17:10	Coffee Break			
17:10-18:50 (100)	Session 4A (IAT): (Chair: John Yen) Autonomous Information Services	Session 4B (WI): (Chair: Kwei-Jay Lin) Context-Aware Computing		Session 4C (WI): (Chair: Soe-Tsyr Yuan) Collaborative Filtering and Recommendation (1)
18:50-19:30	Break			
19:30-20:30	Reception			The Atrium of the Computer Science Building

October 15, Wednesday			
Time	Sessions		
08:30-09:15	Invited Talk 3 (Chair: Ning Zhong): "Web Intelligence and Fuzzy Logic—The Concept of Web IQ (WIQ)", Prof. Lotfi A. Zadeh Imperial Ballroom		
09:15-09:20	Break		
Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
09:20-10:50 (90)	Session 5A (IAT): (Chair: Tarek Helmy) Embodied Agents and Agent-Based System Applications (1)	Session 5B (WI): (Chair: Einoshin Suzuki) Categorization and Ranking (1)	Session 5C (WI): (Chair: Jingtao Yao) Web Mining and Data Engineering (2)
10:50-11:10	Coffee Break		
11:10-12:40 (90)	Session 6A (IAT): (Chair: Leendert van der Torre) Multi-Agent Systems, Modeling and Methodology (1)	Session 6B (WI): (Chair: Peter Brusilovsky) Web Services	Session 6C (WI): (Chair: Chunnian Liu) Web Mining and Data Engineering (3)
12:40-13:40	Lunch		
13:40-14:25	Invited Talk 4 (Chair: Toyoaki Nishida): "Grid Research in China and the Vega Grid Project at ICT", Prof. Zhiwei Xu Imperial Ballroom		
14:25-14:30	Break		
14:30-16:10 (100)	Session 7A (IAT): (Chair: Leon Sterling) Embodied Agents and Agent-Based System Applications (2)	Session 7B (IAT): (Chair: Ron Sun) Autonomous Pricing and Negotiation (2)	Session 7C (WI): (Chair: Vijay Raghavan) Web Information Search and Retrieval (1)
16:10-16:30	Coffee Break		
16:30-17:30 (60)	Session 8A (WI): (Chair: Ali A. Ghorbani) Web Agents (1)	Session 8B (WI): (Chair: Craig Linn) Ontology Engineering (2)	Session 8C (WI): (Chair: Marco Gori) Web Topology and Social Networks (2)
17:30-17:35	Break		
17:35-18:35 (60)	Session 9A (WI): (Chair: Kwang Mong Sim) Web Agents (2)	Session 9B (WI): (Chair: Josiah Poon) Categorization and Ranking (2)	Session 9C (IAT): (Chair: Marias Silaghi) Cooperative Problem Solving
18:35-19:00	Break		
19:00-20:30	Banquet		
Pier 22			
October 16, Thursday			
Time	Sessions		
08:30-09:15	Invited Talk 5 (Chair: Jiming Liu): "Web Information Extraction with Lixto: Visual Logic and Expressive Power ", Prof. Georg Gottlob Imperial Ballroom		
09:15-09:20	Break		
Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
09:20-10:50 (90)	Session 10A (IAT): (Chair: Wayne Wobcke) Agent Behaviors and Reinforcement Learning (2)	Session 10B (WI): (Chair: Zhiwei Xu) E-Business and E-Technology (1)	Session 10C (WI): (Chair: Jingtao Yao) Web Information Extraction and Management
10:50-11:10	Coffee Break		
11:10-12:40 (90)	Session 11A (WI): (Chair: Toyoaki Nishida) Intelligent Human-Web Interaction	Session 11B (WI): (Chair: Ernestina Menasalvas) E-Business and E-Technology (2)	Session 11C (WI): (Chair: Ning Zhong) Web Mining and Data Engineering (4)
12:40-14:00	Lunch		
14:00-15:40 (100)	Session 12A (IAT): (Chair: Ville Kononen) Multi-Agent Systems, Modeling and Methodology (2)	Session 12B (IAT): (Chair: Raymond Y. K. Lau) Knowledge Discovery and Data Mining Agents (1)	Session 12C (IAT): (Chair: Martin Purvis) Ubiquitous Systems and E-Technology Agents
15:40-16:00	Coffee Break		
16:00-17:00 (60)	Session 13A (IAT): (Chair: Huaglority Tianfield) Mobile Agents	Session 13B (IAT): (Chair: Vladimir Gorodetsky) Knowledge Discovery and Data Mining Agents (2)	Session 13C (WI): (Chair: Georg Gottlob) Web Information Search and Retrieval (2)
17:00-17:05	Break		
17:05-18:05 (60)	Session 14A (IAT): (Chair: Xiaolong Jin) Agent-Based Simulation	Session 14B (WI): (Chair: Kwok-Wai Cheung) Collaborative Filtering and Recommendation (2)	Session 14C (IAT): (Chair: Seng W. Loke) Autonomous Auctions

Program

Note: A regular paper is denoted by a ‘♦’ symbol, and a short paper is denoted by a ‘●’ symbol. Each regular paper is allocated 20 minutes, and a short paper is allocated 10 minutes.

October 13, Monday				
Time	Workshops and Tutorials			
08:30-09:00	Workshop and Tutorial On-Site Registration			Georgian Lounge
Venue	Regency Ballroom	Imperial Ballroom	Admiral Room	Britannia Room
09:00-10:15	W1: <i>Knowledge Grid and Grid Intelligence</i>	W2: <i>Applications, Products and Services of Web-Based Support Systems</i>	W3: <i>Collaboration Agents: Autonomous Agents for Collaborative Environments</i>	
10:15-10:30	Coffee Break			
10:30-12:00	W1: <i>Knowledge Grid and Grid Intelligence</i> (Cont.)	W2: <i>Applications, Products and Services of Web-Based Support Systems</i> (Cont.)	W3: <i>Collaboration Agents: Autonomous Agents for Collaborative Environments</i> (Cont.)	
12:00-13:30	Lunch			
13:30-15:30	W1: <i>Knowledge Grid and Grid Intelligence</i> (Cont.)	W2: <i>Applications, Products and Services of Web-Based Support Systems</i> (Cont.)	W3: <i>Collaboration Agents: Autonomous Agents for Collaborative Environments</i> (Cont.)	T1: <i>A Glimpse at the Future of Agent Technology</i> Jeffrey M. Bradshaw
15:30-15:40	Coffee Break			
15:40-17:40	W1: <i>Knowledge Grid and Grid Intelligence</i> (Cont.)	W2: <i>Applications, Products and Services of Web-Based Support Systems</i> (Cont.)	W3: <i>Collaboration Agents: Autonomous Agents for Collaborative Environments</i> (Cont.)	T2: <i>Adaptive Web-Based Systems: Technologies and Examples</i> Peter Brusilovsky
16:00-18:30	Conference On-Site Registration			Georgian Lounge

October 14, Tuesday			
Time	Sessions		
08:00-08:50	Conference On-Site Registration		Georgian Lounge
08:50-09:00	Opening Address		Imperial Ballroom
09:00-09:45	Invited Talk 1 (Chair: Nick Cercone): <i>"Mining and Monitoring Data Streams"</i> , Dr. Philip S. Yu		Imperial Ballroom
09:45-10:30	Invited Talk 2 (Chair: Boi Faltings): <i>"Reasoning about Cooperation"</i> , Prof. Michael Wooldridge		Imperial Ballroom
10:30-10:50	Coffee Break		
Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
10:50-12:20 (90)	Session 1A (IAT): (Chair: Jesus Favela) <i>Agent Behaviors and Reinforcement Learning (1)</i> <u>Regular:</u> ♦ <i>Social Interactions in Multi-Agent Systems: A Formal Approach</i> M. Fasli ♦ <i>Representing and Enforcing Interaction Protocols in Multi-Agent Systems: An Approach Based on Conceptual Graphs</i> G. W. Mineau ♦ <i>Controlling Malevolent Behavior in Open Multi-Agent Systems by Means of Deterrence Theory</i> P. Winoto ♦ <i>Modeling and Specifying Scenarios and Agent Behaviors</i> L. Shan and H. Zhu	Session 1B (WI): (Chair: Chunnian Liu) <i>Web Mining and Data Engineering (1)</i> <u>Regular:</u> ♦ <i>Mining Answers in German Web Pages</i> G. Neumann and F. Xu ♦ <i>Generic Text Summarization Using Local and Global Properties of Sentences</i> C. Kruengkrai and C. Jaruskulchai ♦ <i>Incremental Personalized Web Page Mining Utilizing Self-Organizing HCMAC Neural Network</i> C.-M. Chen <u>Short:</u> • <i>Temporal Web Usage Mining</i> M. Hogo, M. Snorek, and P. Lingras • <i>A Data-Mining Approach for Optimizing Performance of an Incremental Crawler</i> H. Bullot, S. K. Gupta, and M. K. Mohania • <i>Web Farming and Data Warehousing for Energy Tradefloors</i> C. Felden and P. Chamoni	Session 1C (WI): (Chair: Jiming Liu) <i>Web Topology and Social Networks (1)</i> <u>Regular:</u> ♦ <i>Local Policies for the Control of Virtual Communities</i> G. Boella and L. van der Torre ♦ <i>Mining Social Network of Conference Participants from the Web</i> Y. Matsuo, H. Tomobe, K. Hasida, and M. Ishizuka ♦ <i>Detecting Near-Replicas on the Web by Content and Hyperlink Analysis</i> E. Di Iorio, M. Diligenti, M. Gori, M. Maggini, and A. Pucci ♦ <i>PageRank and Web Communities</i> M. Bianchini, M. Gori, and F. Scarselli <u>Short:</u> • <i>Community-Based Model and Access Control for Information Grid</i> X. Li, Z. Xu, X. Liu, and N. Yang • <i>Social Scheduler: A Proposal of Collaborative Personal Task Management</i> I. Ohmukai and H. Takeda
12:20-13:20	Lunch		

Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
13:20-15:00 (100)	<p>Session 2A (IAT): (Chair: Boi Faltings) <i>Distributed Problem Solving</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Problem-Solving in Open Environments</i> S. Macho-Gonzalez and B. Faltings ◆ <i>A Distributed Agent Approach to Global Transportation Scheduling</i> D. Perugini, D. Lambert, L. Sterling, and A. Pearce ◆ <i>Efficiency of Emergent Constraint Satisfaction in Small-World and Random Agent Networks</i> X. Jin and J. Liu <p>Short:</p> <ul style="list-style-type: none"> ● <i>HOWTO: Asynchronous PFC-MRDAC-Optimization in Distributed Constraint Problems +- Adopt</i> M.-C. Silaghi ● <i>Arithmetic Circuit for the First Solution of Distributed CSPs with Cryptographic Multi-Party Computations</i> M.-C. Silaghi ● <i>Problem Solving with Attitude and the Theory of Reasoned Action</i> S. Au and N. Parameswaran ● <i>A New Distributed Approach to Solve Meeting Scheduling Problems</i> A. B. Hassine, T. Ito, and T. B. Ho 	<p>Session 2B (IAT): (Chair: Shahram Rahimi) <i>Task-Oriented Agents</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Tasks as Context for Intelligent Agents</i> K. Lister and L. Sterling ◆ <i>Mission Impossible? Automatically Assembling Agents from High-Level Task Descriptions</i> G. Jayaputera, S. Loke, and A. Zaslavsky ◆ <i>A Task-Oriented Agent-Based Mechanism for Theorem Proving</i> Q. B. Vo ◆ <i>Multi-Agent Planning as a Coordination Model for Self-Organized Systems</i> F. Marc, I. Degirmenciyan-Cartault, and A. El Fallah-Seghrouchni ◆ <i>A Resource-Based Framework for Planning and Replanning</i> R. van der Krogt, M. de Weerd, and C. Witteveen <p>Short:</p> <ul style="list-style-type: none"> ● <i>Human-Agent Viewpoint Similarity Based on Terminological Logic for Mixed-Initiative Planning</i> A. Bouzouane and B. Bouchard 	<p>Session 2C (WI): (Chair: Y. Y. Yao) <i>Web Prefetching</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Exploiting Webspace Organization for Accelerating Web Prefetching</i> J. I. Khan and Q. Tao ◆ <i>CARP Compliant Proxy Enforcer Framework</i> K. E. A. Negm ◆ <i>A Real-Time Evolutionary Algorithm for Web Prediction</i> D. Bonino, F. Corno, and G. Squillero <p>Short:</p> <ul style="list-style-type: none"> ● <i>Web Prefetching Using Display-Based Prediction</i> Y. Kim and J. Kim ● <i>WebScout: Support for Revisitation of Web Pages within a Navigation Session</i> N. Milic-Frayling, R. Sommerer, and K. Rodden ● <i>LRU Based Small Latency First Replacement (SLFR) Algorithm for the Proxy Cache</i> S.-W. Shin, K.-Y. Kim, and J.-S. Jang
15:00-15:10	Break		

Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
15:10-16:50 (100)	<p>Session 3A (IAT): (Chair: Jiming Liu) <i>Autonomy-Oriented Computing (AOC)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Assistive Ecologies-Bio-Mimetic Design of Ambient Intelligence</i> M. H. Sorensen ◆ <i>Modeling Agent-Based Load Balancing with Time Delays</i> Y. Wang, J. Liu, and X. Jin ◆ <i>Proxy Ecology-Cooperative Proxies with Artificial Life</i> J. Z. Wang and R. K. Guha <p>Short:</p> <ul style="list-style-type: none"> ● <i>Network Load Balancing Algorithm Using Ants Computing</i> H. Une and F. Qian ● <i>Discrete Bee Dance Algorithms for Pattern Formation on a Grid</i> N. Gordon, I. A. Wagner, and A. M. Bruckstein ● <i>MPLAB: A Novel Agent Architecture for Parallel Processing</i> S. Rahimi, A. Narayanan, and M. Sabharwal ● <i>Soft Gene, Role, Agent: MABS Learns from Sociology</i> Q. Yan, X. Mao, L. Shan, Z. Qi, and H. Zhu 	<p>Session 3B (IAT): (Chair: Jeffery M. Bradshaw) <i>Autonomous Pricing and Negotiation (1)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Dynamic Stochastic Capacity Pricing for Resource Allocation</i> A. G. Anyouzoua, T. D'Hondt, D. C. Akoka, and M. Ba ◆ <i>The Use of Hybrid Negotiation in Resource Coordination Among Agents</i> X. Li and L.-K. Soh ◆ <i>Dynamic Inference of Perceptual Categories in Negotiating Agents</i> M. Grimsley and A. Meehan ◆ <i>Belief Revision for Adaptive Negotiation Agents</i> R. Y. K. Lau, B. Essam, S. Y. Chan, and Z. Huang <p>Short:</p> <ul style="list-style-type: none"> ● <i>Multi-Agent Coalition via Autonomous Price Negotiation in a Real-Time Web Environment</i> H. C. Lau and W. S. Lim ● <i>Privilege Negotiation Agents for Distributed Authorization on World Wide Web</i> R. Au, M. Yao, and M. Looi 	<p>Session 3C (WI): (Chair: Yiming Ye) <i>Ontology Engineering (1)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Semantic Web Complex Ontology Mapping</i> N. Silva and J. Rocha ◆ <i>Ontology-Based Web Mining Model: Representations of User Profiles</i> Y. Li and N. Zhong ◆ <i>Integrating Ontological and Linguistic Knowledge for Conceptual Information Extraction</i> R. Basili, M. Vindigni, and F. M. Zanzotto ◆ <i>Semantic Reliability in Distributed Systems: Ontology Issues and System Engineering</i> C. Linn <p>Short:</p> <ul style="list-style-type: none"> ● <i>Building an Ontology Based on Hub Words for Information Retrieval</i> S. O. Koo, S. Y. Lim, and S. J. Lee ● <i>IISM: An Image Internal Semantic Model for Image Database Based on Relevance Feedback</i> L. Duan and W. Gao
16:50-17:10	Coffee Break		

Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
17:10-18:50 (100)	<p>Session 4A (IAT): (Chair: John Yen) <i>Autonomous Information Services</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>An Agent-Based Digital Self in 24/7 Web Services World: Architecture and Implementation</i> S. Goschnick and L. Sterling ◆ <i>Autonomous Information Services Integration and Allocation in Agent-Based Information Service System</i> X. Lu and K. Mori ◆ <i>A Neural Multi-Agent Based System for Smart HTML Pages Retrieval</i> G. Pilato, S. Vitabile, G. Vassallo, V. Conti, and F. Sorbello ◆ <i>Combining Reactive and Deliberative Agents for Complete Ecosystems in Infospheres</i> F. L. Gandon <p>Short:</p> <ul style="list-style-type: none"> ● <i>Odaies: Ontology-Driven Adaptive Web Information Extraction System</i> N. Zhang, H. Chen, Y. Wang, S.-J. Cheng, and M.-F. Xiong ● <i>Learning DNF Concepts by Constrained Clustering of Positive Instances</i> L. Minqiang and L. Zhi 	<p>Session 4B (WI): (Chair: Kwei-Jay Lin) <i>Context-Aware Computing</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Music Information Retrieval by Detecting Mood via Computational Media Aesthetics</i> Y. Feng, Y. Zhuang, and Y. Pan ◆ <i>MobiShare: Sharing Context-Dependent Data and Services from Mobile Sources</i> E. Valavanis, C. Ververidis, M. Vazirgianis, G. C. Polyzos, and K. Norvag ◆ <i>Determining Remote System Contention States in Query Processing over the Internet</i> W. Liu, Z. Liao, J. Hong, and Z. Liao ◆ <i>Functionality Adaptation: A Context-Aware Service Code Adaptation for Pervasive Computing Environments</i> V. W.-M. Kwan, F. C.-M. Lau, and C.-L. Wang ◆ <i>Information-Need Driven Query Refinement</i> N. Stojanovic <p>Short:</p> <ul style="list-style-type: none"> ● <i>Constraining Model-Based Reasoning Using Contexts</i> L. Gong and D. Riecken ● <i>Towards Know-When Technology in the Mobile Information Space: Long-Term User Trace Log Analysis in the Mobile Internet</i> T. Yamakami 	<p>Session 4C (WI): (Chair: Soe-Tsyr Yuan) <i>Collaborative Filtering and Recommendation (1)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Foundations of Unconstrained Collaborative Web Browsing with Awareness</i> M. Aneiros and V. Estivill-Castro ◆ <i>Clustering Approach for Hybrid Recommender System</i> Q. Li and B. M. Kim ◆ <i>Online Recommendation Based on Customer Shopping Model in E-Commerce</i> J. Ji, Z. Sha, C. Liu, and N. Zhong ◆ <i>Improvements of Naive Bayes Collaborative Filtering Using Interval Estimation</i> V. Robles, P. Larranaga, E. Menasalvas, M. S. Perez, and V. Herves <p>Short:</p> <ul style="list-style-type: none"> ● <i>A Recommendation Algorithm Using Multi-Level Association Rules</i> C. Kim and J. Kim
18:50-19:30	Break		
19:30-20:30	Reception*	The Atrium of the Computer Science Building	

* Reception venue: the atrium of the Computer Science Building, 6050 University Avenue, Halifax.

October 15, Wednesday			
Time	Sessions		
08:30-09:15	Invited Talk 3 (Chair: Ning Zhong): <i>"Web Intelligence and Fuzzy Logic—The Concept of Web IQ (WIQ)"</i> , Prof. Lotfi A. Zadeh Imperial Ballroom		
09:15-09:20	Break		
Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
09:20-10:50 (90)	<p>Session 5A (IAT): (Chair: Tarek Helmy) <i>Embodied Agents and Agent-Based System Applications (1)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>A Hybrid Architecture for Autonomous Navigation Using a CBR Reactive Layer</i> C. Urdiales, E. J. Perez, F. Sandoval, and J. Vazquez-Salceda ◆ <i>MMASS Approach to Localization Problems</i> S. Bandini, S. Manzoni, and G. Vizzari ◆ <i>An Approach to Digitizing and Managing Well-Logging Parameter Graphs with Agent-Based Perspective</i> C. Li, C. Zhang, M. Wang, and Q. Song <p>Short:</p> <ul style="list-style-type: none"> ● <i>Preliminary Performance Evaluation of an Agent-Based Geospatial Data Conflation System</i> S. Rahimi, J. Bjursell, D. Ali, M. Cobb, and M. Paprzycki ● <i>Hybrid Intelligent System for Pricing the Indices of Dual-Listing Stock Markets</i> S. I. Ao ● <i>Introducing Software Agents to Support a Web-Based Collective Activity</i> N. Taurisson and P. Tchounikine 	<p>Session 5B (WT): (Chair: Einoshin Suzuki) <i>Categorization and Ranking (1)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Improving Web Usability by Categorizing Information</i> V. Carchiolo, A. Longheu, and M. Malgeri ◆ <i>Web Image Retrieval Re-Ranking with Relevance Model</i> W.-H. Lin, R. Jin, and A. Hauptmann ◆ <i>An Architecture to Support Navigation and Propose Tips within a Dedicated Website</i> B. Richard, P. Tchounikine, and P. Jacoboni ◆ <i>Topic Continuity for Web Document Categorization and Ranking</i> B. L. Narayan, C. A. Murthy, and S. K. Pal <p>Short:</p> <ul style="list-style-type: none"> ● <i>Incremental Document Clustering Using Cluster Similarity Histograms</i> K. M. Hammouda and M. S. Kamel 	<p>Session 5C (WT): (Chair: Jingtao Yao) <i>Web Mining and Data Engineering (2)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Towards Modernized and Web-Specific Stoplists for Web Document Analysis</i> M. P. Sinka and D. W. Corne ◆ <i>Querying and Clustering Web Pages about Persons and Organizations</i> S. Ye, T.-S. Chua, and J. R. Kei <p>Short:</p> <ul style="list-style-type: none"> ● <i>Attribute Reduction of Rough Sets in Mining Market Value Functions</i> J. Huang, C. Liu, C. Ou, Y. Y. Yao, and N. Zhong ● <i>Bidirectional Hierarchical Clustering for Web Mining</i> Z. Yao and B. Choi ● <i>A Text Mining Approach on Automatic Generation of Web Directories and Hierarchies</i> H.-C. Yang and C.-H. Lee ● <i>A System for Chinese Question Answering</i> G.-T. Huang and H.-H. Yao ● <i>A Comparative Study of Zernike Moments</i> T.-W. Lin and Y.-F. Chou
10:50-11:10	Coffee Break		

Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
11:10-12:40 (90)	<p>Session 6A (IAT): (Chair: Leendert van der Torre) Multi-Agent Systems, Modeling and Methodology (1)</p> <p>Regular:</p> <ul style="list-style-type: none"> ♦ <i>An Investigation of the Long-Term Impact of Knowledge Sharing on Multi-Agent Systems</i> P. Winoto ♦ <i>A Software Engineering Process for BDI Agent-Based Systems</i> T. I. Zhang, E. Kendall, and H. Jiang ♦ <i>On Need-Driven Proactive Information Exchanges in Agent Teams</i> J. Yen, X. Fan, and R. A. Volz <p>Short:</p> <ul style="list-style-type: none"> • <i>Formal Framework for Adaptive Multi-Agent Systems</i> W. Jiao, M. Zhou, and Q. Wang • <i>Modeling the Behaviors of Players in Competitive Environments</i> S.-Y. Chiao and C. S. Xydeas • <i>Identifiability of Causal Effects in a Multi-Agent Causal Model</i> S. Maes, J. Reumers, and B. Manderick • <i>Enlarging the Applicability of a Failure Cause Eradication Based Methodology</i> N. Guionnet and G. Gouarderes 	<p>Session 6B (WI): (Chair: Peter Brusilovsky) Web Services</p> <p>Regular:</p> <ul style="list-style-type: none"> ♦ <i>WISE-Building Simple Intelligence into Web Services</i> S.-T. Yuan and K.-J. Lin ♦ <i>Efficient Matchmaking and Directory Services</i> I. Constantinescu and B. Faltings ♦ <i>Configuring Web Services, Using Structuring and Techniques from Agent Configuration</i> S. van Splunter, M. Sabou, F. M. T. Brazier, and D. Richards <p>Short:</p> <ul style="list-style-type: none"> • <i>Automatic Composition of Web Service Workflows Using a Semantic Agent</i> J. Korhonen, L. Pajunen, and J. Puustjarvi • <i>Ubiquitous Service Interoperation through Polyarchical Middleware</i> M. Yu, A. Taleb-Bendiab, D. Reilly, and W. Omar • <i>Web-Based Medical Decision Support System for Neurological Diseases</i> S. Tsumoto 	<p>Session 6C (WI): (Chair: Chunnian Liu) Web Mining and Data Engineering (3)</p> <p>Regular:</p> <ul style="list-style-type: none"> ♦ <i>WebKIV: Visualizing Structure and Navigation for Web Mining Applications</i> Y. Niu, T. Zheng, J. Chen, and R. Goebel ♦ <i>Two-Phase Web Site Classification Based on Hidden Markov Tree Models</i> Y.-H. Tian, T.-J. Huang, W. Gao, J. Cheng, and P.-B. Kang <p>Short:</p> <ul style="list-style-type: none"> • <i>Concept Decomposition by Fuzzy k-Means Algorithm</i> J. Dobsa and B. D. Basic • <i>Using the KDD Process to Support Web Site Reconfigurations</i> J. D. Velasquez, H. Yasuda, T. Aoki, and R. Weber • <i>A New Facial Feature Extraction Method Based on Linear Combination Model</i> Y. Hu, B. Yin, and D. Kong • <i>Research on Modeling with Dynamic Bayesian Networks</i> F. Tian, H. Zhang, and Y. Lu • <i>A Query Processing Algorithm for Hierarchical Markov Networks</i> C. J. Butz and J. Liu
12:40-13:40	Lunch		
13:40-14:25	Invited Talk 4 (Chair: Toyooki Nishida): "Grid Research in China and the Vega Grid Project at ICT" , Prof. Zhiwei Xu Imperial Ballroom		
14:25-14:30	Break		

Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
14:30-16:10 (100)	<p>Session 7A (IAT): (Chair: Leon Sterling) <i>Embodied Agents and Agent-Based System Applications (2)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>FLIP: A Platform to Integrate Embodied Agent Technology</i> L. K. Jensen, B. B. Kristensen, and Y. Demazeau ◆ <i>EMMA: An E-Mail Management Assistant</i> V. Ho, W. Wobcke, and P. Compton ◆ <i>A New Approach of the Collaborative User Interface Agents</i> T. Helmy, S. Amamiya, T. Mine, and M. Amamiya <p>Short:</p> <ul style="list-style-type: none"> ● <i>A Possible Approach to the Development of Robotic Multi-Agent Systems</i> M. Cossentino, L. Sabatucci, and A. Chella ● <i>An Application of Multi-Agent Coordination Techniques in Air Traffic Management</i> M. Nguyen-Duc, J.-P. Briot, and A. Drogoul ● <i>A Multi-Agent System for Optimizing Urban Traffic</i> J. France and A. A. Ghorbani 	<p>Session 7B (IAT): (Chair: Ron Sun) <i>Autonomous Pricing and Negotiation (2)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>A Two-Level Negotiation Framework for Complex Negotiations</i> X. Zhang, V. Lesser, and T. Wagner ◆ <i>Integrative Negotiation in Complex Organizational Agent Systems</i> X. Zhang, V. Lesser, and T. Wagner ◆ <i>Designing Flexible Negotiation Agent with Relaxed Decision Rules</i> K. M. Sim and S. Y. Wang ◆ <i>Agent-Based Decision Support for Actual-World Procurement Scenarios</i> J. A. Rodriguez-Aguilar, A. Giovannucci, A. Reyes-Moro, F. X. Noria, and J. Cerquides <p>Short:</p> <ul style="list-style-type: none"> ● <i>A Procedure for Mediating Between Service Requesters and Providers</i> P. Lamarre and S. Cazalens ● <i>Cost-Based Dynamic Reconfiguration System for Intelligent Agent Negotiation</i> F. P. Maturana, P. Tichy, P. Slechta, R. J. Staron, F. M. Discenzo, K. Hall, and V. Marik 	<p>Session 7C (WI): (Chair: Vijay Raghavan) <i>Web Information Search and Retrieval (1)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Context Sensitive Text Mining and Belief Revision for Adaptive Information Retrieval</i> R. Y. K. Lau <p>Short:</p> <ul style="list-style-type: none"> ● <i>Web-Based Information Retrieval Support Systems: Building Research Tools for Scientists in the New Information Age</i> J. T. Yao and Y. Y. Yao ● <i>Web Intelligence in Information Retrieval</i> K. Curran, C. Murphy, and S. Annesley ● <i>Evaluation of Criteria for Information Retrieval</i> T. Ishioka ● <i>Expected Value of User Sessions: Limitations to the Non-Semantic Approach</i> E. Menasalvas, B. Pardo, S. Millan, E. Hochsztain, and J. M. Pena ● <i>Evolutionary Reinforcement of User Models in an Adaptive Search Engine</i> S. Maleki-Dizaji, Z. A. Othman, H. O. Nyongesa, and J. Siddiqi ● <i>Performance Management in Competitive Distributed Web Search</i> R. Khossainov and N. Kushmerick ● <i>Video Browsing and Retrieval Based on Multimodal Integration</i> Y. Zhu and D. Zhou
16:10-16:30	Coffee Break		

Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
16:30-17:30 (60)	Session 8A (WI): (Chair: Ali A. Ghorbani) Web Agents (1) <u>Regular:</u> ♦ <i>Towards Holistic Web-Based Information Retrieval: An Agent-Based Approach</i> K. M. Sim ♦ <i>Exploiting a Search Engine to Develop More Flexible Web Agents</i> S.-d. Lin and C. A. Knoblock ♦ <i>A QoS Network Routing Algorithm Using Multiple Pheromone Tables</i> S. Tadrus and L. Bai	Session 8B (WI): (Chair: Craig Linn) Ontology Engineering (2) <u>Regular:</u> ♦ <i>Querying Spatiotemporal XML Using DataFoX</i> Y. Chen and P. Revesz ♦ <i>Implementing Explanation Ontology for Agent System</i> X. Su, M. Matskin, and J. Rao ♦ <i>Trust Based Knowledge Outsourcing for Semantic Web Agents</i> L. Ding, L. Zhou, and T. Finin	Session 8C (WI): (Chair: Marco Gori) Web Topology and Social Networks (2) <u>Regular:</u> ♦ <i>Mining Web Site's Clusters from Link Topology and Site Hierarchy</i> K.-W. Cheung and Y. Sun ♦ <i>Enhancing a Web-Based Distance-Learning Curriculum with Dedicated Tools</i> D. Rasseneur, P. Jacoboni, and P. Tchounikine ♦ <i>Graph Structures in Paragraph-Linked Repositories</i> J. Miao
17:30-17:35	Break		
17:35-18:35 (60)	Session 9A (WI): (Chair: Kwang Mong Sim) Web Agents (2) <u>Regular:</u> ♦ <i>Value Centric Trust in Multi-Agent Systems</i> J. Carter and A. A. Ghorbani ♦ <i>Bayesian Network-Based Trust Model</i> Y. Wang and J. Vassileva <u>Short:</u> • <i>Web-Agents Inspired by Ethology: A Population of "Ant"-Like Agents to Help Finding User-Oriented Information</i> A. Revel • <i>Web Agents for Requirements Consistency Management</i> Z. Chen and A. Ghose • <i>AntWeb-The Adaptive Web Server Based on the Ants' Behavior</i> W. M. Teles, L. Weigang, and C. G. Ralha	Session 9B (WI): (Chair: Josiah Poon) Categorization and Ranking (2) <u>Regular:</u> ♦ <i>Detecting Hostile Accesses through Incremental Subspace Clustering</i> M. Narahashi and E. Suzuki ♦ <i>Web-Based Collection Selection Using Singular Value Decomposition</i> J. King and Y. Li ♦ <i>Social Cognitive Factors of Unfair Ratings in Reputation Reporting Systems</i> R. Conte and M. Paolucci <u>Short:</u> • <i>A Generalized Site Ranking Model for Web IR</i> C. Ding and C.-H. Chi	Session 9C (IAT): (Chair: Marias Silaghi) Cooperative Problem Solving <u>Regular:</u> ♦ <i>Many Is More, But Not Too Many: Dimensions of Cooperation of Agents with and without Predictive Capabilities</i> M. Scheutz and P. Schermerhorn ♦ <i>Strategies for Cooperative Search in Distributed Databases</i> J. J. Chua and P. E. Tischer <u>Short:</u> • <i>Collaboration Based on Hierarchical Relationship</i> X. Liang, X. Shen, and Q. Zhao • <i>BDIGGY: A Cognitive Architecture for Cooperative Problem Solving</i> A. Pauchet, N. Chaignaud, and A. E. Fallah-Seghrouchni
18:35-19:00	Break		
19:00-20:30	Banquet*		

Pier 22

* Banquet venue: Pier 22, 1031 Marginal Road, Halifax.

October 16, Thursday			
Time	Sessions		
08:30-09:15	Invited Talk 5 (Chair: Jiming Liu): <i>"Web Information Extraction with Lixto: Visual Logic and Expressive Power "</i> , Prof. Georg Gottlob Imperial Ballroom		
09:15-09:20	Break		
Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
09:20-10:50 (90)	Session 10A (IAT): (Chair: Wayne Wobcke) <i>Agent Behaviors and Reinforcement Learning (2)</i> <u>Regular:</u> ♦ <i>Asymmetric Multi-Agent Reinforcement Learning</i> V. Kononen ♦ <i>Living with Dynamic Concepts in Dynamic Environments: Intelligent Agents that Adapt Themselves</i> M. Rehm ♦ <i>Integrating Reinforcement Learning, Bidding and Genetic Algorithms</i> D. Qi and R. Sun <u>Short:</u> • <i>Multi-Agent Reinforcement Learning Using OLAP-Based Association Rules Mining</i> M. Kaya and R. Alhajj • <i>Q-Learning Automaton</i> F. Qian and H. Hirata	Session 10B (WI): (Chair: Zhiwei Xu) <i>E-Business and E-Technology (1)</i> <u>Regular:</u> ♦ <i>A Negotiation Strategy for Electronic Trade Using Intelligent Agents</i> O. Cairo, J. G. Olarte, and F. Rivera-Illingworth ♦ <i>Service-Oriented Autonomous Decentralized Community Communication Technique for a Complex Adaptive Information System</i> K. Ragab, N. Kaji, and K. Mori <u>Short:</u> • <i>Negotiation Paradigms Based on Knowledge Bead's Methodology</i> Y. Zhuang, S. Fong, and S. Meilin • <i>WICE: A Web-Based Intelligent Cost Estimator for Real-Time Decision Support</i> W.-D. Yu and C.-C. Lai • <i>Adaptive Intelligent Environment for Remote Experimentation</i> M. J. Callaghan, J. Harkin, T. M. McGinnity, and L. P. Maguire • <i>A Comparative Framework for EB Systems Development Methodologies</i> J. Huang, J. Wang, T. Chang, C. Zhao, and L. Wang	Session 10C (WI): (Chair: Jingtao Yao) <i>Web Information Extraction and Management</i> <u>Regular:</u> ♦ <i>A Knowledge Extraction Process Specification for Today's Non-Semantic Web</i> J. L. Arjona, R. Corchuelo, and M. Toro ♦ <i>Topic and Meta-Descriptor Extraction for Text Description</i> N. Hernandez and B. Grau <u>Short:</u> • <i>The Formalization of Argumentation and Its Application in Network Computing</i> Z. Yang and C. Mu • <i>A Hybrid Method for Web Data Extraction</i> Y. Wang and L. Zhou • <i>Learning Information Extraction Patterns from Tabular Web Pages without Manual Labeling</i> X. Gao, M. Zhang, and P. Andreae • <i>An Automated Management Tool for Unstructured Data</i> M. Ceglowski, A. Coburn, and J. Cuadrado
10:50-11:10	Coffee Break		

Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
11:10-12:40 (90)	<p>Session 11A (WI): (Chair: Toyoaki Nishida) <i>Intelligent Human-Web Interaction</i></p> <p>Short:</p> <ul style="list-style-type: none"> • <i>A Novel Web Security Evaluation Model for a One-Time-Password System</i> B. Soh and A. Joy • <i>User Attributes in Web-Based Electronic Service Adoption Model (E-SAM)</i> K. Sandhu and B. Corbitt • <i>A Toolkit for Creating Personalized Presentations</i> D. Pacey, E. Dempster, M. H. Williams, A. Cawsey, D. Marwick, and L. MacKinnon • <i>Adaptive Web Interface Design Using Fuzzy Logic</i> H. O. Nyongesa, T. Shicheng, S. Maleki-Dizaji, S.-T. Huang, and J. Siddiqi • <i>Supporting the Interaction between User and Web-Based Multimedia Information</i> N. Bianchi-Berthouze, N. Katsumi, H. Yoneyama, S. Bhalla, and T. Izumita • <i>Future View: Web Navigation Based on Learning User's Browsing Patterns</i> N. Nagino and S. Yamada • <i>Learning to Perform Moderation in Online Forums</i> A. Arnt and S. Zilberstein • <i>Personalizing a Web Site for Cellular Phones</i> A. Kobayashi and H. Fujioka • <i>Intelligent User Interfaces for Web-Based Configuration Systems</i> L. Ardissono, A. Goy, G. Petrone, M. Holland, R. Schafer, G. Friedrich, and C. Russ 	<p>Session 11B (WI): (Chair: Ernestina Menasalvas) <i>E-Business and E-Technology (2)</i></p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>An Online Multi-Agent E-Sales Recruitment System</i> R. Khosla and T. Goonesekera ◆ <i>Bundling and Pricing for Information Brokerage: Customer Satisfaction as a Means to Profit Optimization</i> D. J. A. Somefun and J. A. La Poutre <p>Short:</p> <ul style="list-style-type: none"> • <i>Design and Implementation of a Web-Based Computational Grid Portal</i> G. He and Z. Xu • <i>An Intelligent Agent-Mediated Web Trading Environment</i> S. Kouremenos, S. Vrettos, and A. Stafylopatis • <i>A Simulation-Based Approach for Testing Market Strategies in Electronic Marketplaces</i> M. J. Viamonte, C. Ramos, F. Rodrigues, and J. S. Cardoso • <i>Increasing Matchmaking Semantics in Intelligent Commerce System</i> R. F. Tomaz and S. Labidi 	<p>Session 11C (WI): (Chair: Ning Zhong) <i>Web Mining and Data Engineering (4)</i></p> <p>Short:</p> <ul style="list-style-type: none"> • <i>Matrix Dimensionality Reduction for Mining Web Logs</i> J. Lu, B. Xu, and H. Yang • <i>Embedded Data Indexing for Fast Stream Interception by Internet Appliances</i> J. I. Khan and Y. He • <i>Clustering for Web Information Hierarchy Mining</i> H.-Y. Kao, J.-M. Ho, and M.-S. Chen • <i>A Neural Network Based Approach to Automated E-Mail Classification</i> J. Clark, I. Koprinska, and J. Poon • <i>Decreasing Saw-Tooth Priority (DSTP) Based Product Data Classifier</i> R. D. Goyal and J. Mukherjee • <i>A New Method for Query Generation Applied to Learning Text Classifiers</i> J. Leblet and M. Quafafou • <i>Intelligent Mapping of Hyperspace</i> C. G. Ralha and J. C. L. Ralha • <i>The Concept of Attribute Dimension and Corresponding Operations</i> Y. Lin and L. Zhanhuai
12:40-14:00	Lunch		

Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
14:00-15:40 (100)	<p>Session 12A (IAT): (Chair: Ville Kononen) Multi-Agent Systems, Modeling and Methodology (2)</p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Norm Governed Multi-Agent Systems: The Delegation of Control to Autonomous Agents</i> G. Boella and L. van der Torre ◆ <i>Inaccessibility in Multi-Agent Systems</i> M. Pechoucek, M. Dobisek, J. Lazansky, and V. Marik ◆ <i>Improving the Fault-Tolerance in MAS with Dynamic Proxy Replicate Groups</i> A. Fedoruk and R. Deters ◆ <i>CARLA-A CORBA-Based Architecture for Lightweight Agents</i> M. Aleksy, A. Korthaus, and M. Schader <p>Short:</p> <ul style="list-style-type: none"> ● <i>Knowledge Sharing in Default Reasoning Based Multi-Agent Systems</i> H. Rybinski and D. Ryzko ● <i>A General Architecture for Autonomous Agents</i> B. Ekdahl, L. Jensen, M. R. Lilja, S. Nyman, and A. Wikstrom 	<p>Session 12B (IAT): (Chair: Raymond Y. K. Lau) Knowledge Discovery and Data Mining Agents (1)</p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>Discovery and Sharing of Knowledge with Self-Organized Agents</i> L. K. Wickramasinghe and L. D. Alahakoon ◆ <i>Discovery of Emergent Natural Laws by Hierarchical Multi-Agent Systems</i> H. Stolk, K. Gates, and J. Hanan ◆ <i>Classification Rule Discovery with Ant Colony Optimization</i> B. Liu, H. A. Abbass, and B. McKay ◆ <i>Learning Knowledge Bases for Information Extraction from Multiple Text-Based Web Sites</i> X. Gao and M. Zhang <p>Short:</p> <ul style="list-style-type: none"> ● <i>Multi-Agent Technology for Distributed Data Mining and Classification</i> V. Gorodetsky, O. Karsaevy, and V. Samoilov ● <i>Agent-Oriented Framework for Decision Tree Evolution</i> M. Šprogar and M. Colnaric 	<p>Session 12C (IAT): (Chair: Martin Purvis) Ubiquitous Systems and E-Technology Agents</p> <p>Regular:</p> <ul style="list-style-type: none"> ◆ <i>An XML-Based Multi-Agent System for the User-Oriented Management of QoS in Telecommunications Networks</i> P. De Meo, J. Mbale, G. Terracina, and D. Ursino ◆ <i>Multi-Agent Interaction Protocols for E-Business</i> M. Purvis, M. Nowostawski, M. Oliveira, and S. Cranefield <p>Short:</p> <ul style="list-style-type: none"> ● <i>Using Self-Organization for Functional Integrity Maintenance of Wireless Sensor Networks</i> J.-P. Jamont and M. Occello ● <i>Validating Interaction in Ubiquitous Software Systems Using Dialogue Oriented Interactions</i> A. Gouaich ● <i>Distributed Ubiquitous Software Services</i> A. Gouaich ● <i>Multi-Agent Autonomic Architecture and Its Application in E-Medicine</i> H. Tianfield ● <i>Virtual Enterprise Formation with Agents-An Approach to Implementation</i> S. A. Petersen, J. Rao, and M. Matskin ● <i>Supporting Knowledge Management Infrastructure: A Multi-Agent Approach</i> W. Dai, S. H. Rubin, and C. Chen
15:40-16:00	Coffee Break		

Venue	Regency Ballroom	Admiral Room	Imperial Ballroom
16:00-17:00 (60)	<p>Session 13A (IAT): (Chair: Huaglority Tianfield) Mobile Agents</p> <p>Regular:</p> <ul style="list-style-type: none"> ♦ <i>Mobile Agents for Data Analysis in Industrial Automation Systems</i> D. P. Buse, J. Q. Feng, and Q. H. Wu <p>Short:</p> <ul style="list-style-type: none"> • <i>A Programming Language for Autonomous and Mobile Agents</i> A. El Fallah-Seghrouchni and A. Suna • <i>A JMS Message Transport Protocol for the JADE Platform</i> E. Curry, D. Chambers, and G. Lyons • <i>Adding Flexibility Using Structured Goals: The Case of Itinerant Mobile Agents</i> T. Phung, S. W. Loke, and J. Harland • <i>Communicative Acts of Elvin-Enhanced Mobile Agents</i> S. W. Loke and A. Zaslavsky 	<p>Session 13B (IAT): (Chair: Vladimir Gorodetsky) Knowledge Discovery and Data Mining Agents (2)</p> <p>Regular:</p> <ul style="list-style-type: none"> ♦ <i>Novel Vertical Mining on Diffsets Structure</i> W. Consue and W. Kurutach ♦ <i>The Role of Agents in Distributed Data Mining: Issues and Benefits</i> M. Klusch, S. Lodi, and G. Moro <p>Short:</p> <ul style="list-style-type: none"> • <i>Web Course Self-Adaptation</i> M. A. Razek, C. Frasson, and M. Kaltenbach • <i>Person Name Identification in Chinese Documents Using Finite State Automata</i> B. Shen, Z. Zhang, and C. Yuan 	<p>Session 13C (WI): (Chair: Georg Gottlob) Web Information Search and Retrieval (2)</p> <p>Short:</p> <ul style="list-style-type: none"> • <i>Towards Automatic Incorporation of Search Engines into a Large-Scale Metasearch Engine</i> Z. Wu, V. Raghavan, H. Qian, V. Rama, W. Meng, H. He, and C. Yu • <i>Using Psychological Word Database in Web Search</i> H. Takeuchi, M. Kitajima, and H. Urokobara • <i>A Unified Fuzzy Feature Indexing Scheme for Region Based Online Image Querying</i> R. Zhang, Z. Zhang, and J. Yao • <i>An Efficient Internet Crawling and Filtering System for the Nationwide Tendering Information Retrieval</i> T. Matsuda, K. Nakamura, and N. Sakamoto • <i>A Framework for an Advanced Reading Support in the Digital Library Age</i> K. Rouane, C. Frasson, and M. Kaltenbach
17:00-17:05	Break		
17:05-18:05 (60)	<p>Session 14A (IAT): (Chair: Xiaolong Jin) Agent-Based Simulation</p> <p>Regular:</p> <ul style="list-style-type: none"> ♦ <i>Method of Crowd Simulation by Using Multi-Agent on Cellular Automata</i> T. Hamagami and H. Hirata <p>Short:</p> <ul style="list-style-type: none"> • <i>A New Agent-Based Framework for the Simulation of Electricity Markets</i> I. Praca, C. Ramos, Z. Vale, and M. Cordeiro • <i>Formal Framework for Modeling and Simulation of DDoS Attacks Based on Teamwork of Hackers-Agents</i> I. Kottenko, A. Alexeev, and E. Man'kov 	<p>Session 14B (WI): (Chair: Kwok-Wai Cheung) Collaborative Filtering and Recommendation (2)</p> <p>Regular:</p> <ul style="list-style-type: none"> ♦ <i>On the Temporal Analysis for Improved Hybrid Recommendations</i> T. Y. Tang, P. Winoto, and K. C. C. Chan <p>Short:</p> <ul style="list-style-type: none"> • <i>INTIMATE: A Web-Based Movie Recommender Using Text Categorization</i> H. Mak, I. Koprinska, and J. Poon • <i>WebGuard: Web-Based Adult Content Detection and Filtering System</i> M. Hammami, Y. Chahir, and L. Chen 	<p>Session 14C (IAT): (Chair: Seng W. Loke) Autonomous Auctions</p> <p>Regular:</p> <ul style="list-style-type: none"> ♦ <i>On Heuristics for Solving Winner Determination Problem in Combinatorial Auctions</i> M. Mito and S. Fujita ♦ <i>Artificial Software Agents on Thin Double Auction Markets-A Human Trader Experiment</i> J. Grossklags and C. Schmidt <p>Short:</p> <ul style="list-style-type: none"> • <i>SIMPLE-A Multi-Agent System for Simultaneous and Related Auctions</i> R. L. Milidui, T. Melcop, F. dos S. Liporace, and C. J. P. de Lucena • <i>Non-Refundable-Bid Auctions for Positions in a Queue: A Decision-Theoretic Analysis</i> P. Winoto and T. Y. Tang

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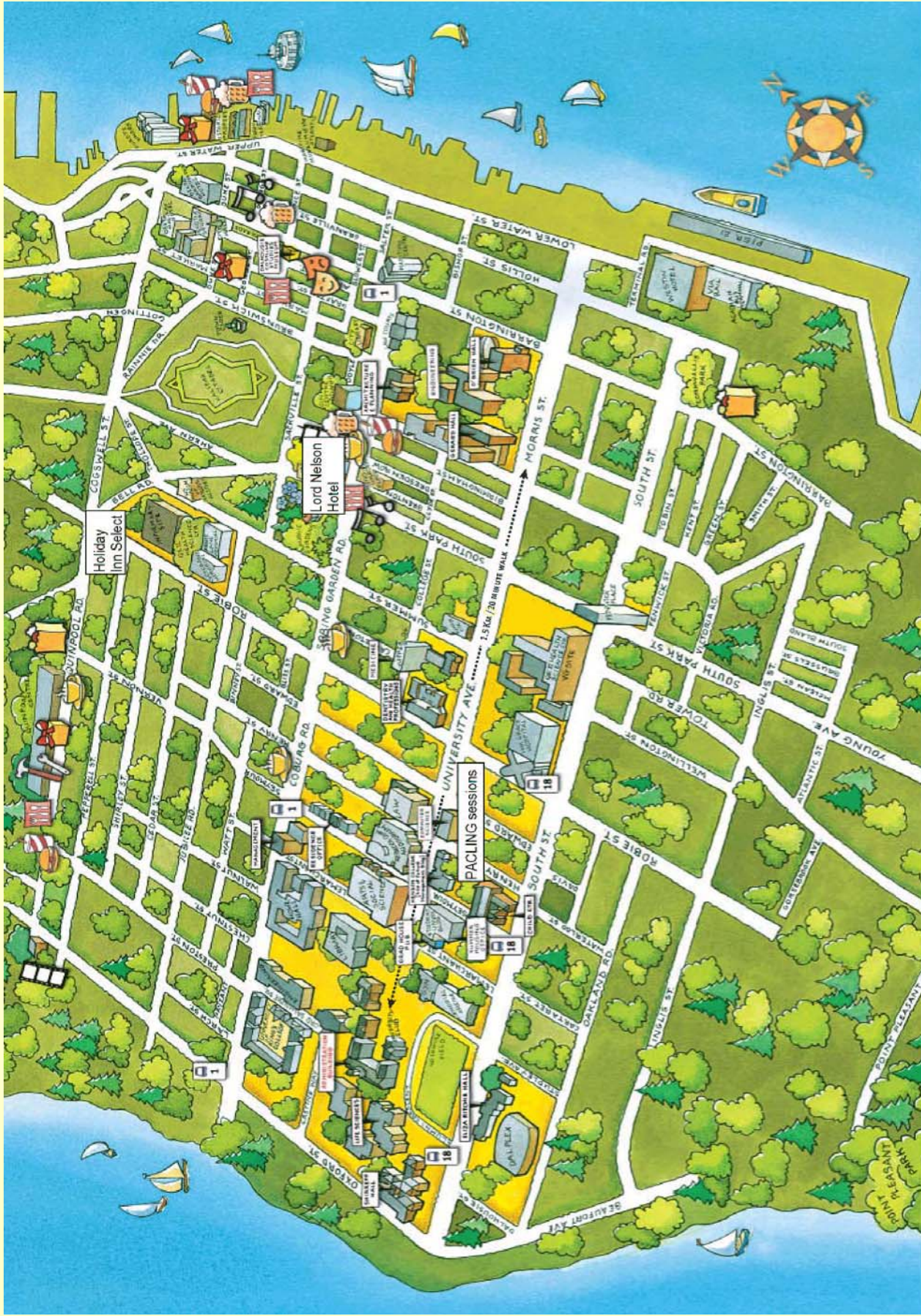
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