The Seventh International
Conference on Autonomous
Agents and Multiagent Systems

Estoril, Portugal
May 12-16, 2008

aamas'08

Programme

FAAMAS

AAMAS 2008 (The Seventh International Conference on Autonomous Agents and Multiagent Systems)

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Vijay Kumar
Radhika Nagpal
Daniele Nardi
Lynne Parker
Alessandro Saffiotti
Paul Scerri
Elizabeth Sklar
Manuela Veloso
Nikos Vlassis
Mary-Anne Williams

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Ruth Aylett
Marc Cavazza
Stacy Marsella
Ana Paiva
Catherine Pelachaud
Helmut Prendinger
Katia Sycara
Daniel Thalmann
R. Michael Youn

Workshops

Full Day   9:30-11:00 / 11:30-13:00 / 14:30-16:00 / 16:30-18:40

W3. AOSE – Room VII
Agent-oriented software engineering (continues on Tuesday)

W6. DALT – Room VI
Declarative agent languages and technologies

W7. OPTMAS – Room XVI
Optimisation in multi-agent systems

W9. MABS – Room IV
Multi-agent based simulation (continues on Tuesday)

W10. MSDM – Room XVII
Multi-agent Sequential decision making in uncertain multi-agent domains

W11. SOCASE – Room VIII
Service-oriented computing: agents, semantics, and engineering

W13. AHC – Room IX
Agents applied in health care

W17. ArgMAS – Room X
Argumentation in multi-agent systems

W18. TRUST – Room V
Trust in agent societies (continues on Tuesday)

W19. ALAMAS & ALAG – Room XII
Adaptive and learning agents and MAS

W21. COIN – Room XII
Coordination, organisations, institutions and norms in agent systems

W23. ACAN – Room XVIII
Agent-based complex automated negotiations

Coffee Breaks: 11:00-11:30 / 16:00-16:30
Lunch Break: 13:00-14:30 (light meal provided by conference organization at hotel Miragem galeria)

13 May – TUESDAY

Full Day   9:00-11:00 / 11:30-13:00 / 14:30-16:00 / 16:30-18:00

W1. FMM – Room XVII
Formal models and methods for multi-robot systems

W2. FML – Room IV
Functional Markup Language: Why Conversational Agents do what they do

W4. PROMAS – Room VII
Programming multi-agent systems

W5. AT2AI – Room VI
From agent theory to agent implementation

W8. DCR – Room V
Distributed constraint reasoning

W12. ATOP – Room VIII
Agent-based technologies and applications for enterprise interoperability

W14. ATT – Room IX
Agents in traffic and transportation

W15. ATSN – Room X
Agent technology for sensor networks

W16. AP2PC – Room XVI
Agents and peer-to-peer computing

W20. AMEC – Room XIII
Agent-mediated electronic commerce

W22. OAMAS – Room XVIII
Organised adaptation in multi-agent systems

Half Day Morning   9:00-11:00 / 11:30-13:00

W3. AOSE – Room XII
Agent-oriented software engineering

W18. TRUST – Room XV
Trust in agent societies

Half Day Afternoon   14:30-16:00 / 16:30-18:00

W9. MABS – Room XII
Multi-agent based simulation

Special Session   18:20-19:20

Joint Session – AOSE, PROMAS, AT2AI – Room XII

Coffee Breaks: 11:00-11:30 / 16:00-16:30
Lunch Break: 13:00-14:30 (light meal provided by conference organization at hotel Miragem galeria)

Tutorials

12 May – MONDAY

Full Day   **9:30-11:00 / 11:30-13:00 / 14:30-16:00 / 16:30-18:40**

T3. – Room ESTORIL
Programming Languages and Development Tools for Multiagent Systems

Half Day Morning   **9:30-11:00 / 11:30-13:00**

T5. – Room TV
Fair Division

Half Day Afternoon   **14:30-16:00 / 16:30-18:40**

T4. – Room TV
WADE: An Open Source Platform for Workflow and Agents

Coffee Breaks: 11:00-11:30 / 16:00-16:30
Lunch Break: 13:00-14:30 (light meal provided by conference organization at hotel Miragem galeria)

Half Day Morning   9:00-11:00 / 11:30-13:00

T1. – Room ESTORIL
Multiagent Organizations

T6. – Room TV
Agent-Mediated Electronic Negotiation (Part 1)

Half Day Afternoon   14:30-16:00 / 16:30-18:00

T2. – Room ESTORIL
Trust and Reputation in Multiagent Systems

T7. – Room XV
Complex negotiations for Intractable Problems
(Agent-Mediated Electronic Negotiation-Part 2)

T8. – Room TV
Decision-Making in Extended Multiagent Interactions

Coffee Breaks: 11:00-11:30 / 16:00-16:30
Lunch Break: 13:00-14:30 (light meal provided by conference organization at hotel
Miragem galleria)

Technical Sessions Details

Session 1   10:10 – 12:10

Virtual Agents I – Room VI
Chair: Jean-Claude Martin

- An Empathic Virtual Dialog Agent to Improve Human-Machine Interaction *(Magalie Ochs, Catherine Pelachaud, David Sadek)*– Poster Session A

- *ERIC: A Generic Rule-based Framework for an Affective Embodied Commentary Agent(Martin Strauss, Michael Kipp)* – Poster Session A

- The Identification of Users by Relational Agents*(Daniel Schulman, Mayur Sharma, Timothy Bickmore)* – Poster Session A

- Trackside DEIRA: A Dynamic Engaging Intelligent Reporter Agent *(François Knoppel, Almer Tigelaar, Danny Oude Bos, Thijs Alofs, Zsofi Ruttkay)* Poster Session A

- Does the Contingency of Agents' Nonverbal Feedback Affect Users' Social Anxiety? *(Sin-Hwa Kang, Jonathan Gratch, Ning Wang, James Watt)* Poster Session A

- The Design of a Generic Framework for Integrating ECA Components *(Hung-Hsuan Huang, Aleksandra Cerekovic, IgorPandzic, Yukiko Nakano, Toyoaki Nishida)* – Poster Session A

Agent Based System Development I – Room VII
Chair: Carles Sierra

- Cost-Based BDI Plan Selection for Change Propagation *(Khanh Hoa Dam, Michael Winikoff)* – Poster Session C

- Integrating Artifact-Based Environments with Heterogeneous Agent-Programming Platforms *(Alessandro Ricci, Michele Piunti, Lemi Daghan Acay, Rafael Bordini, Jomi Hübner, Mehdi Dastani)* – Poster Session C

- A Domain Specific Modeling Language for Multiagent Systems*(Christian Hahn)* Poster Session C

Agent Communication – Room XII
Chair: Shaheen Fatima

- Constitutive Interoperability *(Amit Chopra, Munindar Singh)* – Poster Session A

- Annotation and Matching of First-Class Agent Interaction Protocols *(Tim Miller, Peter McBurney)* – Poster Session B

- Agent Communication in Ubiquitous Computing: the Ubismart Approach *(Jurriaan van Diggelen, Robbert-Jan Beun, Rogier van Eijk, Peter J. Werkhoven)* Poster Session C

- Using Organization Knowledge to Improve Routing Performance in Wireless Multi-Agent Networks *(Huzaifa Zafar, Victor Lesser, Dan Corkill, DeepakGanesan)* – Poster Session A

- Conjunctive Queries for Ontology based Agent Communication in MAS *(Cassia Trojahn, Paulo Quaresma, Renata Vieira)* – Poster Session B

- A Cooperation-Based Model For Evolution Of Service Ontologies *(Murat Sensoy, Pınar Yolum)* – Poster Session C

Agent Societies and Societal Issues – RoomXIII
Chair: Michael Luck

- Robust Normative Systems *(Thomas Agotnes, Wiebe van der Hoek, Michael Wooldridge)* – Poster Session B

- Sequential Decision Making with Untrustworthy Service Providers *(Luke Teacy, Georgios Chalkiadakis, Alex Rogers, NickJennings)* – Poster Session B

- A Statistical Relational Model for Trust Learning *(Achim Rettinger, Matthias Nickles, Volker Tresp)* – Poster Session B

- The Conclusion of Contracts by Software Agents in the Eyes of the Law *(Tina Balke, Torsten Eymann)* – Poster Session B

- Norm Emergence Under Constrained Interactions in Diverse Societies *(Partha Mukherjee, Stephane Airiau, Sandip Sen)* – Poster Session B

- Checking Correctness of Business Contracts via Commitments *(Nirmit Desai, Nanjangud Narendra, Munindar Singh)* – Poster Session B

Economic Paradigms I – Room III
Chair: Han La Poutré

- Strategic Betting for Competitive Agents *(Liad Wagman, Vincent Conitzer)* Poster Session A

- Synthesis of Strategies from Interaction Traces *(Tsz-Chiu Au, Dana Nau, Sarit Kraus)* – Poster Session C

- Artificial agents learning human fairness *(Steven De Jong, Karl Tuyls, Katja Verbeeck)* – Poster Session B
- Self-Interested Database Managers Playing The View Maintenance Game *(Hala Mostafa, Victor Lesser, Gerome Miklau)* – Poster Session C
- Zero-Intelligence Agents in Prediction Markets *(Abraham Othman)*
  Poster Session B
- The Effects of Market-Making on Price Dynamics *(Sanmay Das)*
  Poster Session C

Session 2   13:40 – 15:00

Agent Theories Models and Architectures I – Room VI
Chair: Onn Shehory

- Quantifying Over Coalitions in Epistemic Logic *(Thomas Agotnes, Wiebe van der Hoek, Michael Wooldridge)* – Poster Session A
- Coalitions and Announcements *(Thomas Agotnes, Hans van Ditmarsch)*
  Poster Session A
- Modelling Coalitions: ATL + Argumentation *(Nils Bulling, Carlos I. Chesnevar, Jurgen Dix)* – Poster Session A
- Information-based Deliberation *(Carles Sierra, John Debenham)*
  Poster Session A

Agent Cooperation I – Room VII
Chair: Eugénio Oliveira

- Regulating Air Traffic Flow with Coupled Agents *(Adrian Agogino, Kagan Tumer)* – Poster Session C
- Decentralized Algorithms for Collision Avoidance in Airspace *(David Sislak, Jiri Samek, Michal Pechoucek)* – Poster Session C
- Heuristics for Negotiation Schedules in Multi-plan Optimization *(Bo An, Fred Douglis, Fan Ye)* – Poster Session C
- Reaction Functions for Task Allocation to Cooperative Agents*(Xiaoming Zheng, Sven Koenig)* – Poster Session C

Agent and Multi-Agent Learning I – RoomXII
Chair: Han La Poutré

- Autonomous Transfer for Reinforcement Learning*(Matthew Taylor, Gregory Kuhlmann, Peter Stone)* – Poster Session B
- Analysis of an Evolutionary Reinforcement Learning Method in a Multiagent Domain*(Jan Hendrik Metzen, Mark Edgington, YohannesKassahun, Frank Kirchner)* – Poster Session B
- The Utility of Temporal Abstraction in Reinforcement Learning*(Nicholas Jong, Todd Hester, Peter Stone)* – Poster Session B
- Switching Dynamics of Multi-Agent Learning*(Peter Vrancx, Karl Tuyls, Ronald Westra)* – Poster Session B

Agent Reasoning I – Room XIII
Chair: Rafael Bordini

- Goal Generation with Relevant and Trusted Beliefs *(Célia da Costa Pereira, Andrea G. B. Tettamanzi)* – Poster Session C
- Suspending and Resuming Tasks in Intelligent Agents *(John Thangarajah, James Harland, David Morley, NeilYorke-Smith)* – Poster Session C
- Partial Goal Satisfaction and Goal Change *(Yi Zhou, Leon van der Torre, Yan Zhang)* – Poster Session C
- Belief Operations for Motivated BDI Agents *(Patrick Krümpelmann, Matthias Thimm, Gabriele Kern-Isberner, Manuela Ritterskamp)* – Poster Session C

Economic Paradigms II – Room III
Chair: Kate Larson

- Playing Games for Security: An Efficient Exact Algorithm for Solving Bayesian Stackelberg Games *(Praveen Paruchuri, Jonathan Pearce, Janusz Marecki, Milind Tambe, Fernando Ordonez, Sarit Kraus)* – Poster Session B
- Solving two-person zero-sum repeated games of incomplete information *(Andrew Gilpin, Tuomas Sandholm)* – Poster Session A
- A heads-up no-limit Texas Hold'em poker player: Discretized betting models and automatically generated equilibrium finding programms *(Andrew Gilpin, Tuomas Sandholm, Troels Bjerre Sørensen*) – Poster Session C
- Computing an Approximate Jam/Fold Equilibrium for 3-Agent No-Limit Texas Hold'em Tournaments*(Sam Ganzfried, Tuomas Sandholm)* – Poster Session A

Multi-Robotics I – Room VI
Chair: Pedro Lima

- Adaptive Multi-Robot Wide-Area Exploration and Mapping *(Kian Hsiang Low, John Dolan, Pradeep Khosla)* – Poster Session A

- A Decentralized Approach to Cooperative Situation Assessment in Multi-Robot Systems *(Giuseppe Settembre, Alessandro Farinelli, Paul Scerri, Katia Sycara, Daniele Nardi)* – Poster Session A

- Self-organized Flocking with a Mobile Robot Swarm*(Ali Turgut, Hande Celikkanat, Fatih Gokce, Erol Sahin)* – Poster Session A

Victor Lesser Distinguished Dissertation Award talk *(Radu Jurca)* **– Room XII**

Agent Reasoning II – Room VII
Chair: Mehdi Dastani

- A constrained argumentation system for practical reasoning *(Leila Amgoud, Caroline Devred, Marie-Christine Lagasquie-Schiex)* – Poster Session C

- Using Enthymemes in an Inquiry Dialogue System *(Elizabeth Black, Anthony Hunter)* – Poster Session C

- A dialogue mechanism for public argumentation using conversation policies*(Yuqing Tang, Simon Parsons)* – Poster Session A

Agent Cooperation II – Room XIII
Chair: Katia Sycara

- Role-Based Teamwork Activity Recognition in Observations of Embodied Agent Actions *(Linus Luotsinen, Ladislau Boloni)* – Poster Session C

- Tags and Image Scoring for Robust Cooperation *(Nathan Griffiths)*
Poster Session A

- Efficiently Determining the Appropriate Mix of Personal Interaction and Reputation Information in Partner Choice*(Shulamit Reches, Philip Hendrix, Barbara Grosz, Sarit Kraus)* – Poster Session A

Economic Paradigms III – Room III
Chair: Jeff Rosenschein

- Anonymity-Proof Shapley Value: Extending Shapley Value for Coalitional Games in Open Environments *(*Naoki Ohta, Vincent Conitzer, Yasufumi Satoh, Atsushi Iwasaki, Makoto Yokoo) – Poster Session C

- An anytime approximation method for the inverse Shapley value problem *(Shaheen Fatima, Michael Wooldridge, Nick Jennings)* – Poster Session B

- Approximating Power Indices *(Yoram Bachrach, Vangelis Markakis, Ariel Proccacia, Jeffrey Rosenschein, Amin Saberi)* – Poster Session A

Session 4   10:10 – 12:10

Agent Theories Models and Architectures II – RoomVI
Chair: Rafael Bordini

- A Temporal Logic for Markov Chains*(Wojtek Jamroga)* – Poster Session B

- Model-Checking Agent Refinement*(Lacramioara Astefanoaei, Frank S. de Boer)* Poster Session B

- Goals in Agent Systems: A Unifying Framework*(M. Birna van Riemsdijk, Mehdi Dastani, Michael Winikoff)* – Poster Session B

- Internal models and private multi agent belief revision *(Guillaume Aucher)* Poster Session C

- Anchoring Institutions in Agents' Attitudes: Towards a Logical Framework for Autonomous MAS*(Benoit Gaudou, Dominique Longin, Emiliano LoriniLuca Tummolini)* – Poster Session C

- Verifying time, memory and communication bounds in systems of reasoning agents*(Natasha Alechina, Brian Logan, Hoang Nga Nguyen, Abdur Rakib)* Poster Session C

Agent Based System Development II PANEL – Room II

Agent Simulations/ Emergent Behaviour - Room III
Chair: Elisabeth Sklar

- Resource Limitations, Transmission Costs and Critical Thresholds in Scale-Free Networks*(Chung-Yuan Huang, Chuen-Tsai Sun, Chia-Ying Cheng, Yu-Shiuan Tsai)* – Poster Session B

- Agent-Based Simulation of the Spatial Dynamics of Crime*(Tibor Bosse, Charlotte Gerritsen)* – Poster Session B

- Reusing Models in Multi-Agent Simulation with Software Components*(Paulo Salem da Silva, Ana Cristina Vieira de Melo)* – Poster Session B

- Agent-based Models for Animal Cognition: A Proposal and Prototype*(Elske van der Vaart, Rineke Verbrugge)* – Poster Session B

- Multi Agent Based Simulation of Transport Chains*(Paul Davidsson, Johan Holmgren, Jan Persson, LindRamstedt)* – Poster Session C

- Programming Agents as a Means of Capturing Self-Strategy*(Michal Chalamish, David Sarne, Sarit Kraus)* – Poster Session C

Industry Track I – Room I
Chair: Anna Perini

- Autonomic Machine Control - A Case Study*(Christian Dannegger, Dominic Greenwood)*
- An Interactive Platform for Auction-Based Allocation of Loads in Transportation Logistics*(Valentin Robu, Han Noot, Han La Poutré, Willem-Jan van Schijndel)* Poster Session A
- Pan-supplier Stock Control in a Virtual Warehouse*(Emad El-Deen El-Akehal, Julian Padget)* – Poster Session A
- WADE: A software platform to develop mission critical applications exploiting agents and workflows*(Giovanni Caire, Danilo Gotta, Massimo Banzi)* Poster Session A
- BDI-Agents for Agile Goal-Oriented Business Processes*(Birgit Burmeister, M. Arnold, Felicia Copaciu, Giovanni Rimassa)* – Poster Session B
- Agent-based Patient Admission Scheduling in Hospitals (*Anke K. Hutzschenreuter, Peter A. N. Bosman, Ilona Blonk-Altena, Jan van Aarle, Han La Poutré)* Poster Session B

Economic Paradigms IV – Room VII
Chair: Vincent Conitzer

- Automated Design of Scoring Rules by Learning from Examples*(Ariel Procaccia, Aviv Zohar, Jeffrey Rosenschein)* – Poster Session A
- Evaluation of election outcomes under uncertainty*(Noam Hazon, Yonatan Aumann, Sarit Kraus, Michael Wooldridge)* – Poster Session C
- Complexity Issues in Preference Elicitation and Manipulation*(Toby Walsh)* Poster Session B
- Divide and Conquer: False-Name Manipulations in Weighted Voting Games*(Yoram Bachrach, Edith Elkind)* – Poster Session B
- Copeland Voting: Ties Matter*(Piotr Faliszewski, Edith Hemaspaandra, Henning Schnoor)* – Poster Session C
- A Broader Picture of the Complexity of Strategic Behavior in Multi-Winner Elections*(Reshef Meir, Ariel Procaccia, Jeffrey Rosenschein)* – Poster Session A

Virtual Agents II – Room VI
Chair: Elisabeth Sklar

- Being a Part of the Crowd: Toward Validating VR Crowds Using Presence *(Nuria Pelechano, Catherine Stocker, Jan Allbeck, Norman Badler***)** – Poster Session B

- Simulation of Individual Spontaneous Reactive Behavior *(Alejandra Garcia-Rojas, Mario Gutierrez, Daniel Thalmann*) – Poster Session B

- SmartBody: Behavior Realization for Embodied Conversational Agents *(Marcus Thiebaux, Andrew Marshall, Stacy Marsella, Marcelo Kallmann)*
  Poster Session B

- Distinctiveness in multimodal behaviors *(Maurizio Mancini, Catherine Pelachaud)*
  Poster Session B

Agent and Multi-Agent Learning II – Room II
Chair: Kagan Tumer

- Modeling how Humans Reason about Others with Partial Information *(Sevan Ficici, Avi Pfeffer)* – Poster Session B

- Simultaneously Modeling Humans' Preferences and their Beliefs about Others' Preferences *(Sevan Ficici, Avi Pfeffer)* – Poster Session C

- Opponent Modelling in Automated Multi-Issue Negotiation Using Bayesian Learning *(Dmytro Tykhonov, Koen Hindriks)* – Poster Session C

- A Few Good Agents: Multi-Agent Social Learning *(Jean Oh, Stephen Smith)*
  Poster Session C

Agent Reasoning III – Room III
Chair: Ed Durfee

- An Exact Algorithm for Solving MDPs under Risk-Sensitive Objective with one-Switch Utility Functions *(Yaxin Liu, Sven Koenig)* – Poster Session A

- Controlling Deliberation in a Markov Decision Process-Based Agent *(George Alexander, Anita Raja, David Musliner)* – Poster Session A

- Generalized Adaptive A* *(Xiaoxun Sun, Sven Koenig, William Yeoh)*
  Poster Session A

- A Model of Contingent Planning for Agent Programming Languages *(Yves Lesperance, Giuseppe De Giacomo, Atalay Ozgovde)* – Poster Session A

Industry Track II – Room VII
Chair: Michael Berger

- Case Studies for Contract-based Systems *(Michal Jakob, Michal Pĕchouček, Simon Miles, Michael Luck)* – Poster Session C

- Electronic contracting in aircraft aftercare: A case study *(Felipe Meneguzzi, Simon Miles, Michael Luck, CamdenHolt, Malcolm Smith)* – Poster Session C

- A Multi-Agent Simulation System for Prediction and Scheduling of Aero Engine Overhaul *(Armin Stranjak, Partha Sarathi Dutta, Mark Ebden, Alex Rogers, Perukrishnen Vytelingum)* – Poster Session B

- Transitioning Multiagent Technology to UAV Applications *(Paul Scerri, Tracy Von Gonten, Gerald Fudge, Sean Owens, Katia Sycara)* – Poster Session B

Economic Paradigms V – Room I
Chair: Makoto Yokoo

- Power and Stability in Connectivity Games *(Yoram Bachrach, Jeffrey Rosenschein, Ely Porat)* – Poster Session B

- A Tractable and Expressive Class of Marginal Contribution Nets and Its Applications *(Edith Elkind, Leslie Ann Goldberg, Paul Goldberg, Michael Wooldridge)* – Poster Session A

- Cooperative Boolean Games *(Paul Dunne, Sarit Kraus, Wiebe van der Hoek, Michael Wooldridge)* – Poster Session C

- Coalitional Skill Games *(Yoram Bachrach, Jeffrey Rosenschein)*
  Poster Session C

Session 6   16:10 – 17:10

Multi-Robotics II – Room VI
Chair: Paul Scerri

- Autonomous Geocaching: Navigation and Goal Finding in Outdoor Domains *(James Neufeld, Michael Bowling, Jason Roberts, Stephen Walsh, Adam Milstein, Michael Sokolsky)* – Poster Session A

- The Impact of Adversarial Knowledge on Adversarial Planning in Perimeter Patrol *(Noa Agmon, Vladimir Sadov, Sarit Kraus, Gal Kaminka)* – Poster Session A

- A Realistic Model of Frequency-Based Multi-Robot Fence Patrolling *(Yehuda Elmaliach, Asaf Shiloni, Gal Kaminka)* – Poster Session A

Agent Based System Development III – Room II
Chair: Takayuki Ito

- A Model-driven, Agent-based Approach for the Integration of Services into a Collaborative BP *(Ingo Zinnikus, Christian Hahn, Klaus Fischer)*
  Poster Session C

- Flexible Service Provisioning with Advance Agreements *(Sebastian Stein, Terry Payne, Nick Jennings)* – Poster Session C

- Exploiting Organisational Information for Service Coordination in Multiagent Systems *(Alberto Fernandez, Sascha Ossowski)* – Poster Session C

Agent Cooperation III – Room III
Chair: Chengqi Zhang

- On K-Optimal Distributed Constraint Optimization Algorithms: New Bounds and Algorithms *(Emma Bowring, Jonathan Pearce, Christopher Portway, Manish Jain, Milind Tambe)* – Poster Session A

- Evaluating the Performance of DCOP Algorithms in a Real World, Dynamic Problem *(Robert Junges, Ana Bazzan)* – Poster Session A

- BnB-ADOPT: An Asynchronous Branch-and-Bound DCOP Algorithm *(William Yeoh, Ariel Felner, Sven Koenig)* – Poster Session A

Industry Track III – Room VII
Chair: Satoshi Nishiyama

- Autonomic Multi-Agent Management of Power and Performance in Data Centers *(Rajarshi Das, Jeffrey O. Kephart, Charles Lefurgy,Gerald Tesauro, David W. Levine, Hoi Chan)* – Poster Session C

- Cooperative search for optimizing pipeline operations *(T. Mora, A.B. Sesay, J. Denzinger, H. Golshan, G. Poissant, C. Konecnik)* – Poster Session A

- Deployed ARMOR Protection: The Application of a Game Theoretic Model for Security at the Los Angeles International Airport *(James Pita, Manish Jain, Janusz Marecki, Fernando Ordóñez, Christopher Portway, Milind Tambe, Craig Western, Praveen Paruchuri, Sarit Kraus)* – Poster Session A

Economic Paradigms VI – Room I
Chair: Ulle Endriss

- Mechanism Design for Abstract Argumentation *(Iyad Rahwan, Kate Larson)* Poster Session C

- Undominated VCG Redistribution Mechanisms *(Mingyu Guo, Vincent Conitzer)* Poster Session B

- Optimal-in-Expectation Redistribution Mechanisms *(Mingyu Guo, Vincent Conitzer)* – Poster Session A

Session 7   10:10 – 12:10

Virtual Agents III – Room I
Chair: Zsofia Ruttkay

- Modeling Parallel and Reactive Empathy in Virtual Agents: An Inductive Approach *(Scott McQuiggan, Jennifer Robison, Robert Phillips, James Lester)* Poster Session C

- Towards Background Emotion Modeling for Embodied Virtual Agents *(Luís Morgado, Graca Gaspar)* – Poster Session C

- MADeM: a multi-modal decision making for social MAS *(Francisco Grimaldo, Miguel Lozano Ibañez, Fernando Barber*) – Poster Session C

- Dynamic Bayesian Network Based Interest Estimation for Visual Attentive Presentation Agents *(Boris Brandherm, Helmut Prendinger, Mitsuru Ishizuka)* Poster Session C

- A Model of Gaze for the Purpose of Emotional Expression in Virtual Embodied Agents *(Brent Lance, Stacy Marsella)* – Poster Session C

- Politeness and Alignment in Dialogues with a Virtual Guide *(Markus de Jong, Mariet Theune, Dennis Hofs)* – Poster Session C

Agent Reasoning IV– Room II
Chair: Helder Coelho

- Not All Agents Are Equal: Scaling up Distributed POMDPs for Agent Networks *(Janusz Marecki, Tapana Gupta, Pradeep Varakantham, Milind Tambe, Makoto Yokoo)* – Poster Session A

- The Permutable POMDP: Fast Solutions to POMDPs for Preference Elicitation *(Doshi Finale, Nicholas Roy)* – Poster Session B

- Value-Based Observation Compression for DEC-POMDPs *(Alan Carlin, Shlomo Zilberstein)* – Poster Session B

- No-Regret Learning and a Mechanism for Distributed Multi-Agent Planning *(Jan-P. Calliess, Geoffrey Gordon)* – Poster Session B

- Exploiting Locality of Interaction in Factored Dec-POMDPs *(Frans Oliehoek, Matthijs Spaan, Shimon Whiteson, NikosVlassis)* – Poster Session B

- Interaction-Driven Markov Games for Decentralized Multiagent Planning under Uncertainty *(Matthijs Spaan, Francisco Melo)* – Poster Session B

Agent cooperation IV – Room VII
Chair: Radhika Nagpal

- Automated Global-to-Local Programming in 1-D Spatial Multi-Agent Systems *(Daniel Yamins, Radhika Nagpal)* – Poster Session B
- An Approach to Online Optimization of Heuristic Coordination Algorithms *(Jumpol Polvichai, Paul Scerri, Michael Lewis)* – Poster Session B
- Using Multi-agent Potential Fields in Real-time Strategy Games *(Johan Hagelbäck, Stefan Johansson)* – Poster Session B
- Decentralised Coordination of Low-Power Embedded Devices Using the Max-Sum Algorithm *(Alessandro Farinelli, Alex Rogers, Adrian Petcu, Nick Jennings)* Poster Session B
- Look Where You Can See:Predictability & Criticality Metrics for Coordination in Complex Environments (*Rajiv Maheswaran, Pedro Szekely, Marcel Becker, Stephen Fitzpatrick, Gergely Gati, Jing Jin, Robert Neches, Nader Noori, Craig Rogers, Romeo Sanchez, Kevin Smyth, Chris Van Buskirk)* – Poster Session B
- Aligning social welfare and agent preferences to alleviate traffic congestion *(Kagan Tumer, Zach Welch, Adrian Agogino)* – Poster Session C

Agent and Multi-Agent Learning III – Room VI
Chair: Sandip Sen

- Sequential Decision Making in Repeated Coalition Formation under Uncertainty *(Georgios Chalkiadakis, Craig Boutilier)* – Poster Session C
- Emerging coordination in infinite team Markov games *(Francisco Melo, Isabel Ribeiro)* – Poster Session C
- Approximate Predictive State Representations *(Britton Wolfe, Michael James, Satinder Singh)* – Poster Session A
- MB-AIM-FSI: A Model Based Framework for exploiting gradient ascent MultiAgent Learners in Strategic *(Doran Chakraborty, Sandip Sen)* Poster Session A
- Sigma Point Policy Iteration *(Michael Bowling, Alborz Geramifard, David Wingate)* – Poster Session A
- Dynamics Based Control with PSRs *(Ariel Adam, Zinovi Rabinovich, Jeffrey Rosenschein)* – Poster Session A

Economic Paradigms VII – Room III
Chair: Jonathan Bredin

- Stochastic Search Methods for Nash Equilibrium Approximation in Simulation-Based Games *(Yevgeniy Vorobeychik, Michael Wellman)* – Poster Session A

- Searching for Approximate Equilibria in Empirical Games *(Patrick Jordan, Yevgeniy Vorobeychik, Michael Wellman)* – Poster Session C

- Computationally-efficient Winner Determination for Mixed Multi-Unit Combinatorial Auctions *(Andrea Giovannucci, Meritxell Vinyals, Juan A. Rodriguez-Aguilar, Jesus Cerquides)* – Poster Session B

- Characterizing effective auction mechanisms: Insights from the 2007 TAC market design competition *(Jinzhong Niu, Kai Cai, Enrico Gerding, Peter McBurney, Simon Parsons)* – Poster Session B

- Mobile Opportunistic Commerce: Mechanisms, Architecture, and Application *(Ece Kamar, Eric Horvitz, Chris Meek)* – Poster Session B

- Selecting Strategies Using Empirical Game Models: An Experimental Analysis of Meta-Strategies *(Christopher Kiekintveld, Michael Wellman)* – Poster Session A

Session 8   **13:40 – 14:20**

Multi-Robotics III– Room VII
Chair: Radhika Nagpal

- Sensing-based Shape Formation on Modular Multi-Robot Systems: A Theoretical Study *(Chih-Han Yu, Radhika Nagpal)* – Poster Session B

- PNP: A Formal Model for Representation and Execution of Multi-Robot Plans *(Vittorio Ziparo, Luca Iocchi, Daniele Nardi, Pier Francesco Palamara, Hugo Costelha)* – Poster Session B

Agent Based System Development IV – Room VI
Chair: Michael Winikoff

- Towards verifying compliance in agent-based Web service compositions *(Alessio Lomuscio, Hongyang Qu, Monika Solanki)* – Poster Session A

- Semantic Matchmaking of Web Services using Model Checking *(Akin Gunay, Pınar Yolum)* – Poster Session A

Economic Paradigms VIII– Room III
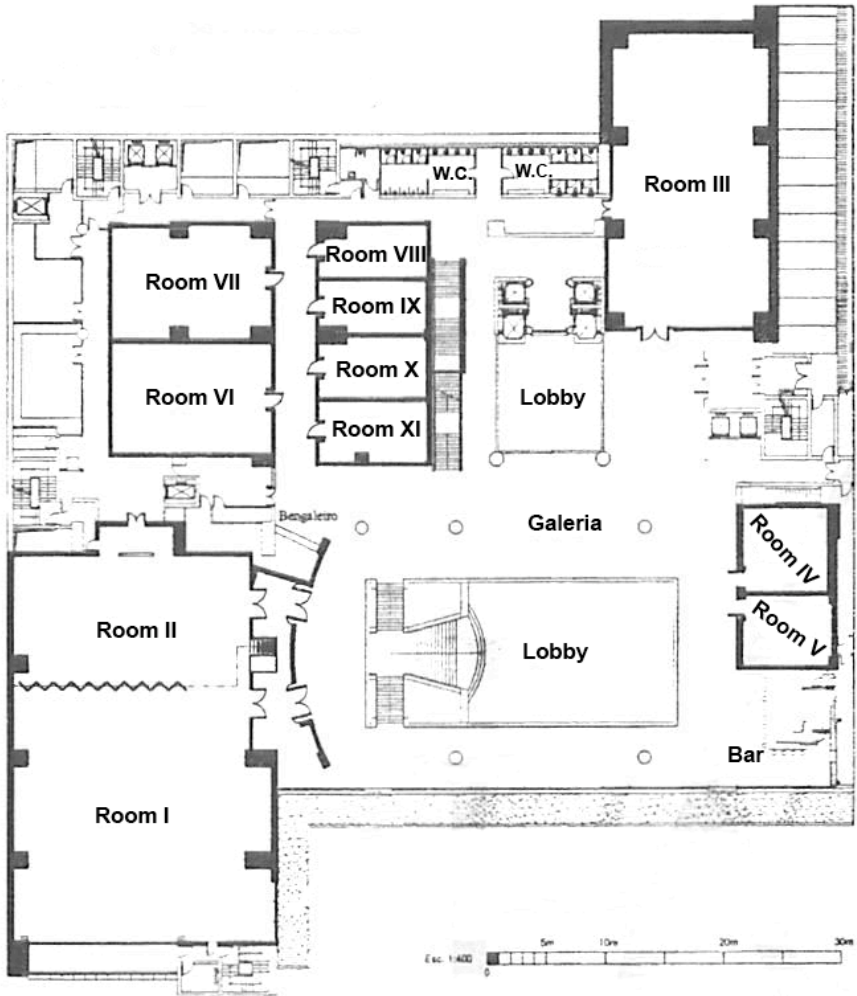**Chair: Felix Brandt**

- Distributed Multiagent Resource Allocation in Diminishing Marginal Return Domains *(Yoram Bachrach, Jeffrey Rosenschein)* – Poster Session B
- Trajectories of Goods in Distributed Allocation (*Yann Chevaleyre, Ulle Endriss, Nicolas Maudet)* – Poster Session A

Map of Hotel

Lobby floor
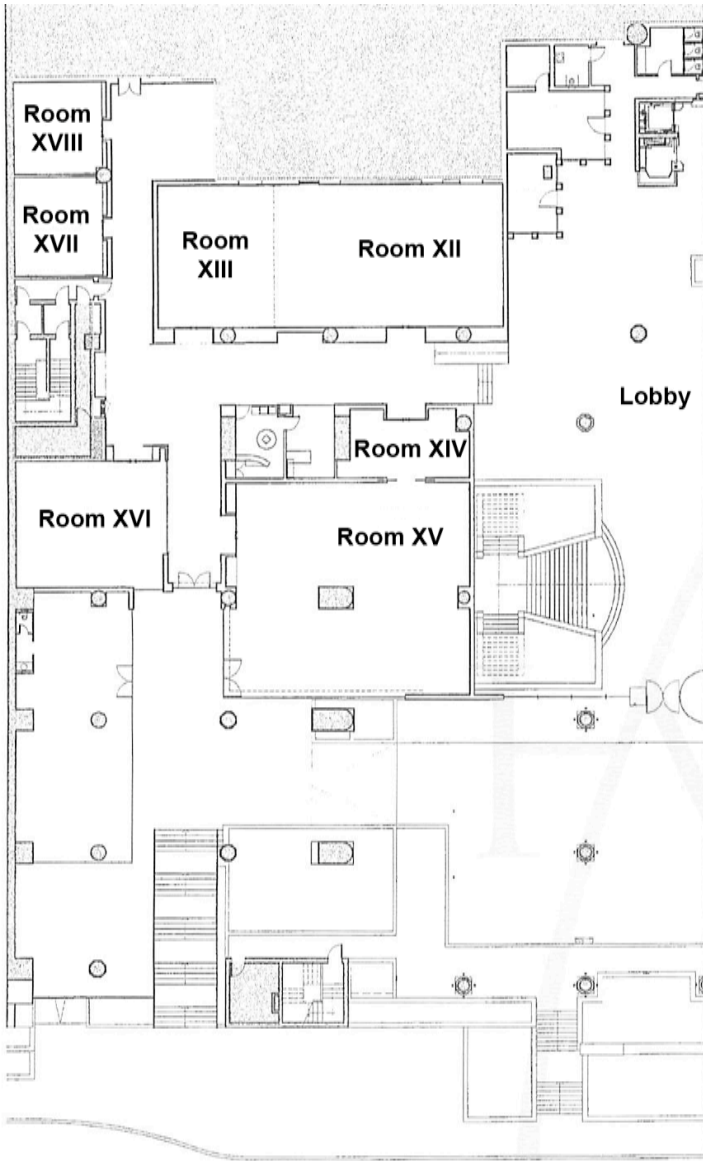
Gallery floor

3rd Floor

Room Tv – This room is located on the 3rd floor. When leaving the elevator turn left. The room is the first one on the right.

Room Estoril – This room is located on the 3rd floor between Oasis restaurant and Cristovão Colombo Bar.

Conference Programme Overview

Time	14 May – WEDNESDAY	15 May – THURSDAY	16 May – FRIDAY
08:20 – 08:40	**Conference Opening**		
08:40 – 09:40	**Invited Talk - Demetri Terzopoulos**, **Room I and II** *"Autonomous Virtual Humans and Lower Animals: From Biomechanics to Intelligence"*	**Invited Talk - Moshe Tennenholtz**, **Room I and II** *"Game Theoretic Recommendations: some progress in an uphill battle"*	**Invited talk - Randy Beard**, **Room I and II** *"Cooperative Control of Small and Micro Air Vehicles"*
09:40 – 10:10	**Coffee Break**	**Coffee Break**	**Coffee Break**
10:10 – 12:10	**Session 1:** • Virtual Agents I - **Room VI** • Agent Based System Development I - **Room VII** • Agent Communication - **Room XII** • Agent Societies and Societal Issues - **Room XIII** • Economic Paradigms - **Room III**	**Session 4:** • Agent Theories Models and Architectures II - **Room VI** • Agent Based System Development. II PANEL- **Room II** • Agent Simulations / Emergent Behaviour - **Room III** • Industry Track I - **Room I** • Economic Paradigms IV -**Room VII**	**Session 7:** • Virtual Agents III - **Room I** • Agent Reasoning IV - **Room II** • Agent cooperation IV **Room VII** • Agent and Multi-Agent Learning III - **Room VI** • Economic Paradigms VII **Room III**
12:10 – 13:40	**Lunch***	**Lunch****	**Lunch****
13:40 – 14:20	**Session 2:** • Agent Theories Models and Architectures I - **Room VI** • Agent Cooperation I - **Room VII** • Agent and Multi-Agent Learning I - **Room XII**	**Session 5:** • Virtual Agents II - **Room VI** • Agent and Multi-Agent Learning II - **Room II** • Agent Reasoning III - **Room III** • Economic Paradigms V - **Room I** • Industry Track II - **Room VII**	**Session 8:** • Multi-Robotics III - **Room VII** • Agent Based System Development. IV - **Room VI** • Economic Paradigms VIII **Room III**
14:20 – 14:30	• Agent Reasoning I - **Room XIII**		
14:30 – 15:00	• Economic Paradigms II - **Room III**		**Conference Closing**

* meal **not** provided by conference organization

** light meal provided by conference organization at hotel Miragem galeria

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Time	Program	Demos / Parallel Sessions
15:00 – 15:30	Coffee Break	Coffee Break
15:30 – 16:10	**Session 3:** • Multi-Robotics I - **Room VI** • Victor Lesser Distinguished Dissertation Award talk - **Room XII**	**Demos:** • Academic Software **Room XIV** • Industrial Software **Room XIV** • Robotics **Room XVII**
16:10 – 16:30	• Agent Reasoning II - **Room VII** • Agent Cooperation II - **Room XIII** • Economic Paradigms III - **Room III**	**Session 6:** • Multi-Robotics II - **Room VI** • Agent Based System Development III - **Room II** • Agent Cooperation III - **Room III** • Economic Paradigms VI - **Room I** • Industry Track III - **Room VII**
16:30 – 17:10	**Posters A:***** • Main Track **Room I and II** • Virtual Agents Track **Galeria** • Multi Robots Track **Galeria**	**Demos:** • Academic Software **Room XIV** • Industrial Software **Room XIV** • Robotics **Room XVII**
17:10 – 17:30		
17:30 – 17:40	**Posters B:***** • Main Track **Room I and II** • Virtual Agents Track **Galeria** • Multi Robots Track **Galeria**	
17:40 – 18:30		**Invited Talk - Yoav Shoham Room I and II** *"Computer Science and Game Theory"*
18:30 – 18:40	**Posters C:***** • Main Track **Room I and II** • Virtual Agents Track **Galeria** • Multi Robots Track **Galeria**	
18:40 – 19:30		**Buses depart for dinner banquet at 18.45 sharp from Hotel Miragem main entrance**

***For information on which posters are assigned to which sessions, please see Technical Session Details, Short Papers List or the Abstracts booklet.

List of Short Papers

Multi-Robotics Track

On Reduced Time Fault Tolerant Paths for Multiple UAV Covering a Hostile Terrain
(Rahul Sawhney, Madhava Krishna, Srinathan Kannan, Mahesh Mohan)
Poster Session C

Protoswarm: A Language for Programming Multi-Robot Systems Using the Amorphous Medium Abstraction *(Jonathan Bachrach, James McLurkin, Anthony Grue)* – Poster Session A

A Scalable and Distributed Model for Self-Organization and Self-Healing *(Michael Rubenstein, Wei-Min Shen)* – Poster Session B

Teaching Multi-Robot Coordination using Demonstration of Communication and State Sharing *(Sonia Chernova, Manuela Veloso)* – Poster Session C

Modelling, Analysis and Execution of Multi-Robot Tasks using Petri Nets *(Hugo Costelha, Pedro Lima)* – Poster Session A

Coalition game-based distributed coverage of unknown environments by robot swarms *(Ke Cheng, Prithviraj Dasgupta)* – Poster Session B

Decentralized Coordination of Automated Guided Vehicles *(David Herrero-Pérez, Humberto Martínez-Barberá)* – Poster Session C

Robust Team Play in Highly Uncertain Environments *(Henry Work, Eric Chown, Tucker Hermans, Jesse Butterfield)* – Poster Session A

A Coordination Mechanism for Swarm Navigation: Experiments and Analysis *(Leandro Marcolino, Luiz Chaimowicz)* – Poster Session B

Multi-robot Markov Random Fields *(Jesse Butterfield, Odest Jenkins, Brian Gerkey)*
Poster session B

Virtual Agents Track

Creating Crowd Variation with the OCEAN Personality Model *(Funda Durupinar, Jan Allbeck, Nuria Pelechano, Norman Badler)* – Poster Session B

Influence of Social Relationships on Multiagent Persuasion *(Katsunori Kadowaki, Kazuki Kobayashi, Yasuhiko Kitamura)* – Poster Session B

What Should the Agent Know? The Challenge of Capturing Human Knowledge *(Emma Norling)* – Poster Session A

iCat: An Affective Game Buddy Based on Anticipatory Mechanisms *(Iolanda Leite, Carlos Martinho, André Pereira, Ana Paiva)* – Poster Session B

If I were you - Double appraisal in affective agents *(Ruth Aylett, Sandy Louchart)*
Poster Session C

User's Gestural Exploration of Different Virtual Agents' Expressive Profiles *(Matthieu Courgeon, Jean-Claude Martin, Christian Jacquemin)* – Poster Session A

Negotiating Task Interruptions with Virtual Agents for Health Behavior Change *(Timothy Bickmore, Daniel Mauer, Francisco Crespo, Thomas Brown)*
Poster Session B

The Senior Companion Multiagent Dialogue System *(Hugo Pinto, Yorick Wilks, Roberta Catizone, Alexiei Dingli)* – Poster Session C

Dancing the Night Away — Controlling a Virtual Karaoke Dancer by Multimodal Expressive Cues *(Matthias Rehm, Thurid Vogt, Nikolaus Bee, Michael Wissner)*
Poster Session A

iCat, the Chess Player: The influence of embodiment in the enjoyment of a game *(André Pereira, Carlos Martinho, Iolanda Leite, Ana Paiva)* – Poster Session B

Learning to Interact: Connecting Perception with Action in Virtual Environments *(Pedro Sequeira, Ana Paiva)* – Poster Session C

The Intensity of Perceived Emotions in 3D Virtual Humans *(Ahmad Shaarani, Daniela Romano)* – Poster Session A

Conviviality Masks in Multiagent Systems (P*atrice Caire, Serena Villata, Guido Boella, Leon van der Torre)* – Poster Session B

So tell me what happened: turning agent-based interactive drama into comics *(Tiago Alves, Ana Rita Simões, Rui Figueiredo, Marco Vala, Ana Paiva, Ruth Aylett)*
Poster Session C

Methods for Complex Single-Mind Architecture Designs *(Kristinn Thorisson, Gudny Ragna Jonsdottir, Eric Nivel)* – Poster Session A

The Intermediary Agent's Brain: Supporting Learning to Collaborate at the Inter-Personal Level *(Juan Martinez-Miranda, Bernhard Jung, Sabine Payr, Paolo Petta)* – Poster Session B

A 'Companion' ECA with Planning and Activity Modelling *(Marc Cavazza, Cameron Smith, Daniel Charlton, Li Zhang, Jaakko Hakulinen, Markku Turunen)*
Poster Session C

Emotional Reading of Medical Texts Using Conversational Agents *(Gersende Georg, Catherine Pelachaud, Marc Cavazza)* – Poster Session A

Individual Differences in Expressive Response: A Challenge for ECA Design *(Ning Wang, Stacy Marsella, Tim Hawkins)* – Poster Session B

Another Look at Search-Based Drama Management *(Michael Mateas)*
Poster Session C

Agent-Based System Development

A Flexible Framework for Verifiable Agent Programming *(Louise Dennis, Berndt Farwer, Rafael Bordini, Michael Fisher)* – Poster Session B

Structure in Threes: Modelling Organization-Oriented Software Architectures Built Upon Multi-Agent Systems *(Matthias Wester-Ebbinghaus, Daniel Moldt)* Poster Session C

Engineering Large-scale Distributed Auctions *(Peter Gradwell, Michel Oey, Reinier Timmer, Julian Padget, Frances Brazier)* – Poster Session A

Ontology-based Test Generation for Multi Agent Systems *(Cu Nguyen, Anna Perini, Paolo Tonella)* – Poster Session B

Agent and Multi-Agent Learning

Non-linear Dynamics in Multiagent Reinforcement Learning Algorithms *(Sherief Abdallah, Victor Lesser)* – Poster Session A

Expediting RL by Using Graphical Structures *(Peng Dai, Alexander Strehl, Judy Goldsmith)* – Poster Session B

Transfer of Task Representation in Reinforcement Learning using Policy-based Proto-value Functions *(Eliseo Ferrante, Alessandro Lazaric, Marcello Restelli)* Poster Session C

Reinforcement Learning for DEC-MDPs with Changing Action Sets and Partially Ordered Dependencies *(Thomas Gabel, Martin Riedmiller)* – Poster Session A

Using Adaptive Consultation of Experts to Improve Convergence Rates in Multiagent Learning *(Greg Hines, Kate Larson)* – Poster Session B

A New Perpective to the Keepaway Soccer: The Takers *(Atil Iscen, Umut Erogul)* Poster Session C

On the Usefulness of Opponent Modeling: the Kuhn Poker case study *(Alessandro Lazaric, Mario Quaresimale, Marcello Restelli)* – Poster Session A

Graph Laplacian Based Transfer Learning in Reinforcement Learning *(Yi-Ting Tsao, Ke-Ting Xiao, Von Wun Soo)* – Poster Session B

Autonomous Agent Learning using an Actor-Critic Algorithm and Behavior Models *(Victor Uc Cetina)* – Poster Session C

Teaching Sequential Tasks with Repetition through Voice and Vision *(Harini Veeraraghavan, Manuela Veloso)* – Poster Session A

Adaptive Kanerva-based Function Approximation for Multi-Agent Systems *(Cheng Wu, Waleed Meleis)* – Poster Session B

Efficient Multi-Agent Reinforcement Learning through Automated Supervision *(Chongjie Zhang, Sherief Abdallah, Victor Lesser)* – Poster Session C

Agent Reasoning

Continual Collaborative Planning for Mixed-Initiative Action and Interaction *(Michael Brenner)* – Poster Session B

Supervision and Diagnosis of Joint Actions in Multi-Agent Plans *(Roberto Micalizio, Pietro Torasso)* – Poster Session C

Theoretical and Experimental Results on the Goal-Plan Tree Problem *(Patricia Shaw, Berndt Farwer, Rafael Bordini)* – Poster Session A

Robust and Efficient Plan Recognition for Dynamic Multi-agent Teams *(Gita Sukthankar, Katia Sycara)* – Poster Session B

Agent Cooperation

Social Reward Shaping in the Prisoner's Dilemma *(Monica Babes, Enrique Munoz, Michael Littman)* – Poster Session A

Mitigating Catastrophic Failure at Intersections of Autonomous Vehicles *(Kurt Dresner, Peter Stone)* – Poster Session B

Multi-Agent Search using Sensors with Heterogeneous Capabilities *(Guruprasad KR, Debasish Ghose)* – Poster Session C

A new approach to cooperative pathfinding *(Renee Jansen, Nathan Sturtevant)*
Poster Session A

Resource constrained distributed constraint optimization using resource constraint free pseudo-tree *(Toshihiro Matsui, Marius Silaghi, Katsutoshi Hirayama, Makoto Yokoo, Hiroshi Matsuo)* – Poster Session B

Coordination of First Responders Under Communication and Resource Constraints *(Robert Lass, Joseph Kopena, Evan Sultanik, Duc Nguyen, Christopher Dugan, William Regli)* – Poster Session C

Replacing the Stop Sign: Unmanaged Intersection Control for Autonomous Vehicles *(Mark Van Middlesworth, Kurt Dresner, Peter Stone)* – Poster Session A

An Improved Dynamic Programming Algorithm for Coalition Structure Generation *(Talal Rahwan, Nick Jennings)* – Poster Session B

Discovering Tactical Behaviour Patterns Supported by Topological Structures in Soccer-Agent Domains *(Fernando Ramos, Huberto Ayanegui)* – Poster Session C

A Best-First Anytime Search Algorithm for Coalition Structure Generation *(Chattrakul Sombattheera, Aditya Ghose)* – Poster Session A

RIAACT: A robust approach to adjustable autonomy for human-multiagent teams *(Nathan Schurr, Janusz Marecki, Milind Tambe, Chien-Ju Ho, Jane Yung-jen Hsu)* Poster Session B

Adaptive Manager-side Control Policy in Contract Net Protocol for Massively Multi-Agent Systems *(Sugawara Toshiharu, Satoshi Kurihara, Toshio Hirotsu, Kensuke Fukuda)* – Poster Session C

Towards Bidirectional Distributed Matchmaking *(Victor Shafran, Gal Kaminka, Sarit Kraus, Claudia Goldman)* – Poster Session A

Designing Human-Computer Multi-agent Collaboration in Productive Multi-Player Games *(Wenn-Chieh Tsai, Yuan-Hsiang Lee, Tsung-Hsiang Chang)* – Poster Session B

Trading Off Solution Quality for Faster Computation in DCOP Search Algorithms *(William Yeoh, Sven Koenig, Xiaoxun Sun)* – Poster Session C

Anytime Local Search for Distributed Constraint Optimization *(Roie Zivan)* Poster Session A

Agent Theories, Models and Architectures

Reasoning about agent deliberation (Natasha Alechina, Mehdi Dastani, Brian Logan, John-Jules Meyer) – Poster Session A

Negotiation by Induction (Chiaki Sakama) – Poster Session B

Epistemic Logic and Explicit Knowledge in Distributed Programming (Andreas Witzel, Jonathan Zvesper) – Poster Session C

Agent Societies and Societal Issues

Identifying Beneficial Teammates using Multi-Dimensional Trust *(Jaesuk Ahn, Xin Sui, David DeAngelis, Suzanne Barber)* – Poster Session C

Simulating the Effects of Sanction for the Emergence of Cooperation in a Public Goods Game *(Ana Bazzan, Silvio Dahmen, Alexandre Baraviera)* – Poster Session A

Learning Task-Specific Trust Decisions *(Ikpeme Erete, Erin Ferguson, Sandip Sen)* Poster Session C

Specifying and Enforcing Norms in Artificial Institutions *(Nicoletta Fornara, Marco Colombetti)* – Poster Session A

An Adaptive Probabilistic Trust Model and its Evaluation *(Chung-Wei Hang, Yonghong Wang, Munindar Singh)* – Poster Session C

Extending Virtual Organizations to improve trust mechanisms *(Ramón Hermoso, Roberto Centeno Sánchez, Holger Billhardt, Sascha Ossowski)* Poster Session A

Convergence at Prominent Agents: A Non-Flat Synchronization Model of Situated Multi-Agents *(Jiuchuan Jiang, Yichuan Jiang)* – Poster Session C

How Automated Agents Treat Humans and Other Automated Agents in Situations of Inequity: An Experimental Study *(Ron Katz, Sarit Kraus)* – Poster Session A

A Distributed Normative Infrastructure for Situated Multi-Agent Organisations *(Fabio Okuyama, Rafael Bordini, Antonio Costa)* – Poster Session C

Modeling and Managing Collective Cognitive Convergence *(Van Parunak, Ted Belding, Rainer Hilscher, Sven Brueckner)* – Poster Session A

Determining Top K Nodes in Social Networks using the Shapley Value *(Narayanam RamaSuri, Y. Narahari)* – Poster Session C

Simulating Human Behaviors in Agent Societies *(Alicia Ruvinsky, Michael Huhns)* Poster Session A

Do Humans Identify Efficient Strategies in Structured Peer-to-Peer Systems? *(Stephan Schosser, Klemens Böhm, Bodo Vogt)* – Poster Session B

Social norm emergence in virtual agent societies *(Bastin Tony Roy Savarimuthu, Maryam Purvis, Martin Purvis)* – Poster Session C

Searching and Sharing Information In Networks of Heterogeneous Agents *(George Vouros)* – Poster Session A

Stable cooperation in changing environments *(Humphrey Sorensen)* – Poster Session B

Agent Communication

Efficient Approximate Inference in Distributed Bayesian Networks for MAS-based Sensor Interpretation *(Norman Carver)* – Poster Session C

Synchronization Protocols for Reliable Communication in Fully Distributed Agent Systems *(Hywel Dunn-Davies, Jim Cunningham, Shamima Paurobally)* Poster Session A

A Multi-Agent Based Implementation of a Delphi Process *(Ivan Garcia-Magariño, Jorge Gomez Sanz, Jose R. Perez-Aguera)* – Poster Session B

Economic Paradigms

Strategyproof Deterministic Lotteries under Broadcast Communications *(Alon Altman, Moshe Tennenholtz)* – Poster Session B

Decommitment in Multi-resource Negotiation *(Bo An, Victor Lesser, Kwang Mong Sim)* – Poster Session C

Incentives in Effort Games *(Yoram Bachrach, Jeffrey Rosenschein)* – Poster Session A

Learn While You Earn: Two Approaches to Learning Auction Parameters in Take-it-or-leave-it Auctions *(Archie Chapman, Alex Rogers, Nick Jennings)* – Poster Session B

Incorporating User Utility Into Sponsored-Search Auctions *(Yagil Engel, David Maxwell Chickering)* – Poster Session C

Nonuniform Bribery *(Piotr Faliszewski)* – Poster Session A

A Preliminary result on a representative-based multi-round protocol for multi-issue negotiations *(Katsuhide Fujita, Takayuki Ito, Mark Klein)* – Poster Session B

Approximating Mixed Nash Equilibria using Smooth Fictitious Play in Simultaneous Auctions *(Enrico Gerding, Andrew Byde, Edith Elkind, Zinovi Rabinovich, Nick Jennings)* – Poster Session C

Achieving Efficient and Equitable Collaboration among Selfish Agents using Spender-Signed Currency *(Geert Jonker, Frank Dignum, John-Jules Meyer)* – Poster Session A

Optimized Algorithms for Multi-Agent Routing *(Akihiro Kishimoto, Nathan Sturtevant)* – Poster Session B

Evolutionary Dynamics for Designing Multi-Period Auctions *(Tomas Klos, Gerrit Jan Van Ahee)* – Poster Session C

Understanding How People Design Trading Agents over Time *(Efrat Manistersky, Raz Lin, Sarit Kraus)* – Poster Session A

Approximate Bidding Algorithms for a Distributed Combinatorial Auction *(Benito Mendoza, Jose Vidal)* – Poster Session B

Comparing Winner Determination Algorithms for Mixed Multi-Unit Combinatorial Auctions *(Brammert Ottens, Ulle Endriss)* – Poster Session C

Asynchronous Congestion Games *(Michal Penn, Maria Polukarov, Moshe Tennenholtz)* – Poster Session A

Beyond quasi-linear utility: strategy/false-name-proof multi-unit auction protocols *(Yuko Sakurai, Yasumasa Saito, Atsushi Iwasaki, Makoto Yokoo)* – Poster Session B

Abstractions for Model-Checking Game-theoretic Properties in Combinatorial Auctions *(Emmanuel Tadjouddine, Frank Guerin, Wamberto Vasconcelos)* – Poster Session C

Winner Determination in Combinatorial Auctions with Logic-based Bidding Languages *(Joel Uckelman, Ulle Endriss)* – Poster Session A

Towards Agents Participating in Realistic Multi-Unit Sealed-Bid Auctions *(Ioannis Vetsikas, Nick Jennings)* – Poster Session B

Agent Based Simulations and Emergent Behaviour

Shared Focus of Attention for Heterogeneous Agents *(Jacob Beal)* – Poster Session C

Physical Parameter Optimization in Swarms of Ultra-Low Complexity Agents *(Ryan Connaughton, Paul Schermerhorn, Matthias Scheutz)* – Poster Session C

An adaptive and customizable feedback system for VR-based training simulators *(Maite Lopez-Garate, Alberto Lozano-Rodero, Luis Matey)* – Poster Session C

An Agent Adaptive Model for Self-Organizing Multi-Agent Systems *(Candelaria Sansores, Juan Pavón)* – Poster Session A

Industry and Application Track

MasDISPO_xt: Heat and Sequence Optimisation based on Simulated Trading inside the Supply Chain of Steel Production *(Sven Jacobi, David Raber, Klaus Fischer)* Poster Session A

Argumentation-based agents for eProcurement *(Paul-Amaury Matt, Francesca Toni, Thanassis Stournaras, Dimitris Dimitrelos)* – Poster Session C

Agent-Community-Network-based Business Matching and Collaboration Support System *(Tsunenori Mine, Kosaku Kimura, Satoshi Amamiya, Ken'ichi Takahashi, Makoto Amamiya)* – Poster Session C

OpCog: An Industrial Development Approach for Cognitive Agent Systems in Military UAV Applications *(Kai Reichel, Nico Hochgeschwender, Holger Voos)* Poster Session B

Towards a Reliable Air Traffic Control *(Minh Nguyen-Duc, Zahia Guessoum, Olivier Marin, Jean-François Perrot, Jean-Pierre Briot, Vu Duong)* – Poster Session B

CAMNEP: Agent-Based Network Intrusion Detection System (Martin *Rehak, Michal Pechoucek, Pavel Celeda, Jiri Novotny, Pavel Minarik)* – Poster Session A

List of Demos

Academic Software Room XIV

GS3 and Tartanian: Game theory-based heads-up limit and no-limit Texas Hold'em poker-playing programs *(Andrew Gilpin, Tuomas Sandholm, and Troels Bjerre Sorensen)*

JCAT: A Platform for the TAC Market Design Competition *(Jinzhong Niu, Kai Cai, Enrico Gerding, Peter McBurney, Thierry Moyaux, Steve Phelps, Dave Shield, and Simon Parsons)*

Agent-Based Coordination Technologies in Disaster Management *(Sarvapali D. Ramchurn, Alex Rogers, Kathryn Macarthur, Alessandro Farinelli, Perukrishnen Vytelingum, Ioannis Vetsikas, and Nicholas. R. Jennings)*

Evacuation Guide System based on Massively Multiagent System *(Yuu Nakajima, Shohei Yamane, Hiromitsu Hattori, and Toru Ishida)*

An Agent-Based Electrical Power Market *(Jaime Cerda Jacobo, David De Roure, and Enrico Gerding)*

Electronic Institutions Development Environment *(Marc Esteva, Juan Antonio Rodriguez-Aguilar, Josep Lluis Arcos, Carles Sierra, Pablo Noriega, Bruno Rosell, and David de la Cruz)*

Multi-Agent Plan Diagnosis and Negotiated Repair *(Huib Aldewereld, Pieter Buzing, Geert Jonker, Femke de Jonge, Frank Dignum, John-Jules Ch. Meyer, Nico Roos, and Cees Witteveen)*

Colored Trails: A Multiagent System Testbed for Decision-Making Research *(Sevan Ficici, Avi Pfeffer, Ya'akov Gal, Barbara Grosz, and Stuart Shieber)*

SecondLife as an Evaluation Platform for Multiagent Systems Featuring Social Interactions *(Matthias Rehm and Peter Rosina)*

AGENTFLY: A Multi-Agent Airspace Test-bed *(David Sislak, Premysl Volf, Stepan Kopriva, and Michal Pechoucek)*

DCOPolis: A Framework for Simulating and Deploying Distributed Constraint Reasoning *Algorithms (Evan A. Sultanik, Robert N. Lass, and William C. Regli)*

eCAT: a Tool for Automating Test Cases Generation and Execution in Testing Multi-Agent Systems *(Cu Duy Nguyen, Anna Perini, and Paolo Tonella)*

SEAGENT MAS Platform Development Environment *(Oguz Dikenelli)*

Automated Unit Testing Intelligent Agents in PDT *(Zhiyong Zhang, John Thangarajah, and Lin Padgham)*

INGENIAS Development Kit: a visual multi-agent system development environment *(Jorge J. Gomez-Sanz, Ruben Fuentes , Juan Pav—n, and Ivan Garc'a-Magari–o)*

OperettA: A prototype tool for the design, analysis and development of multi-agent organizations *(Daniel M. Okouya and Virginia Dignum)*

A Context-Aware Personal Desktop Assistant *(H. H. Bui, F. Cesari, D. Elenius, D. N. Morley, S. Natarajan, S. Saadati, E. Yeh, and N. Yorke-Smith)*

Trackside DEIRA: A Dynamic Engaging Intelligent Reporter Agent *(François L.A. Knoppel, Almer S. Tigelaar, Danny Oude Bos, Thijs Alofs, and Zsofia Ruttkay)*

Dynamic Scheduling of Multi-media Streams in Home Automation Systems *(Koen Vangheluwe, Wouter Souffriau, Katja Verbeeck, and Patrick De Causmaecker)*

Urban Form-making through Biased Agent Interaction *(Kaustuv De Biswas and Simon Kim)*

Demonstration of Multi-agent Potential Fields in Real-time Strategy Games *(Johan HagelbŠck and Stefan J. Johansson)*

Simulation of Sensor-based Tracking in Second Life *(Boris Brandherm, Sebastian Ullrich, and Helmut Prendinger)*

A Mobile Agent Approach to Opportunistic Harvesting in Wireless Sensor Networks *(R. Tynan, C. Muldoon, M.J. O'Grady, and G.M.P. O'Hare)*

Industrial Software   Room XIV

Multi-Agent Approach to Network Intrusion Detection *(Martin Rehak, Michal Pechoucek, Pavel Celeda, Vojtech Krmicek, Karel Bartos, and Martin Grill)*

Max-Sum Decentralised Coordination for Sensor Systems *(W. T. L. Teacy, A. Farinelli, N. J. Grabham, P. Padhy, A. Rogers, and N. R. Jennings)*

A Multi-Agent Platform for Auction-Based Allocation of Loads in Transportation Logistics *(Han Noot, Valentin Robu, Han La PoutrŽ, and Willem-Jan van Schijndel)*

LS/ABPM Ð An Agent-powered Suite for Goal-oriented Autonomic BPM *(Giovanni Rimassa, Martin E. Kernland, and Roberto Ghizzioli)*

AERIAL : Hypothetical Trajectory Planning for Multi-UAVs Coordination and Control *(Paul-Edouard Marson, Micha'l Soulignac, and Patrick Taillibert)*

Coordination in Ambiguity: Coordinated Active Localization for Multiple Robots *(Shivudu Bhuvanagiri, Madhava Krishna, and Supreeth Achar)*

Coordination of AGVs in an Industrial Environment *(David Herrero-PŽrez and Humberto Mart'nez-Barber)*

Multi-robot Petri Net Plans: A robotic soccer passing demo *(P.F. Palamara, V. A. Ziparo, L. Iocchi, D. Nardi, P. Lima, and H. Costelha)*

An Embodied Conversational Agent as a Lifestyle Advisor *(Cameron Smith, Daniel Charlton, Li Zhang, Jaakko Hakulinen, Markku Turunen, and Marc Cavazza)*

GoGoBot: Group Collaboration, Multi-Agent Modeling, and Robots *(William Rand, Paulo Blikstein, and Uri Wilensky)*

Engineering Self-Organizing Multi-Agent Systems *(Radhika Nagpal, Chih-han Yu, and Daniel Yamins)*

Invited Speakers

Prof. Demetri Terzopoulos

Title: Autonomous Virtual Humans and Lower Animals: From Biomechanics to Intelligence

Abstract: The confluence of virtual reality and artificial life, an emerging discipline that spans the computational and biological sciences, has yielded synthetic worlds inhabited by realistic artificial flora and fauna. Artificial animals are complex synthetic organisms that have functional, biomechanical bodies, perceptual sensors, and brains with locomotion, perception, behavior, learning, and cognition centers. Virtual humans and lower animals are of interest in computer graphics because they are self-animating graphical characters poised to dramatically advance the interactive game and motion picture industries even more so than have physics-based simulation technologies. More broadly, these biomimetic autonomous agents in their realistic virtual worlds also foster deeper computationally-oriented insights into natural living systems. Furthermore, they engender interesting applications in computer vision, sensor networks, archaeology, and other domains.

Biography: Demetri Terzopoulos is the Chancellor's Professor of Computer Science at the University of California, Los Angeles. He graduated from McGill University and obtained his PhD degree from MIT ('84). He is a Fellow of the ACM, a Fellow of the IEEE, a Fellow of the Royal Society of Canada, and a member of the European Academy of Sciences. His many awards and honors include an Academy Award for Technical Achievement from the Academy of Motion Picture Arts and Sciences for his pioneering work on physics-based computer animation, and the inaugural Computer Vision Significant Researcher Award from the IEEE for his pioneering and sustained research on deformable models and their applications. He is listed by ISI and other indexes as one of the most highly-cited authors in engineering and computer science, with more than 300 published research papers and several volumes, primarily in computer graphics, computer vision, medical imaging, computer-aided design, and artificial intelligence/life. Professor Terzopoulos joined UCLA in 2005 from New York University, where he held the Lucy and Henry Moses Professorship in Science and was Professor of Computer Science and Mathematics at NYU's Courant Institute. Previously he was Professor of Computer Science and Professor of Electrical and Computer Engineering at the University of Toronto, where he currently retains status-only faculty appointments.

Prof. Moshe Tennenholtz

Title: Game-Theoretic Recommendations: Some Progress in an Uphill Battle

Abstract: In this talk we consider two highly challenging problems in the foundations of game theory and its application to multi-agent systems. Namely, we consider the question of how should an agent choose its action in a given game, and the task of leading agents to adopt desired behaviors in a given game. In the recent years we provided some useful attacks on these fundamental problems. Our study of competitive safety analysis and the study of learning in ensembles of games, provide surprisingly useful tools for addressing the first challenge. Our theory of mediators provides powerful tools for addressing the second challenge. These approaches refer to non-cooperative games; in the context of social choice, we introduced the axiomatic approach to ranking/reputation/trust/recommendation systems; in particular, our work on trust-based recommendation systems introduces several basic results in the characterization of useful recommendation techniques.

Biography: Moshe Tennenholtz is a professor with the faculty of Industrial Engineering and Management at the Technion--Israel Institute if technology, where he holds the Sondheimer Technion Academic Chair. During 1999-2002 he has been a visiting professor at Stanford CS department, where he has also been a research associate during the years 1991-1993. Moshe received his B.Sc. in Mathematics from Tel-Aviv University (1986), and his M.Sc. and Ph.D. (1987, 1991) from the Department of Applied Mathematics and Computer Science in the Weizmann Institute. Moshe served as the editor-in-chief of the Journal of Artificial Intelligence Research [JAIR]; he is an associate editor of Games and Economic Behavior, and of the international journal of autonomous agents and multi-agent systems, and an editorial board member of the Journal of Machine Learning Research [JMLR]. In joint work with colleagues and students he introduced several contributions to the interplay between computer science and game theory, such as the study of artificial social systems, co-learning, non-cooperative computing, distributed games, the axiomatic approach to qualitative decision making, the axiomatic approach to ranking, reputation, and trust systems, competitive safety analysis, program equilibrium, mediated equilibrium, and learning equilibrium.

Prof. Yoav Shoham

Title: Computer Science and Game Theory

Abstract: Game theory has been playing an increasingly visible role in computer science, in areas as diverse as artificial intelligence, theory, distributed systems, and other areas. I take stock of where most of the action has been in the past decade or so, and suggest that going forward, the most dramatic interaction between computer science and game theory could be around what might be called game theory pragmatics.

Biography: Yoav Shoham is Professor of Computer Science at Stanford University, where he has been since receiving his PhD in Computer Science from Yale University in 1987 and spending an abbreviated post-doctoral position at the Weizmann Institute of Science. He has worked in various areas of AI, including temporal reasoning, nonmonotonic logics and theories of commonsense. Shoham's interest in recent years has been multiagent systems, and in particular the interaction between computer science and game theory. Shoham is a Fellow of the Association for Advancement of Artificial Intelligence (AAAI), and charter member of the International Game Theory Society. He is an author of four books, an editor of one, and an author of numerous articles. He is also a founder of several successful e-commerce software companies.

Prof. Randy Beard

Title: Cooperative Control of Small and Micro Air Vehicles

Abstract: The focus of this talk will be cooperative control techniques for small and micro air vehicles. There are numerous potential applications of this technology including aerial reconnaissance, border patrol, monitoring forest fires, oil fields, and pipelines, and tracking wildlife. This talk will present a general approach to cooperative control problems which can be summarized in four steps. The first step is to identify the coordination variables which are the minimal information needed to effect cooperation. The second step is to quantify the cooperation constraint and cooperation objective in terms of the coordinate variables. The third step is to develop a centralized cooperation strategy that acts upon the instantaneous values of the coordination variables to achieve the objectives. Finally, the fourth step is to use information consensus schemes to transform the centralized strategy into a decentralized algorithm. The consensus algorithms allow a team of vehicles to agree upon the instantaneous value of the coordination variables while connected through a noisy, inter mittent, time-varying communication network.

We will also show several applications of our approach in the context of small unmanned air vehicles (UAVs). The first application will be to the problem of cooperative rendezvous. There are numerous military scenarios where it is desirable to have a team of UAVs converges simultaneously to a region of interest. However, pop-up threats, wind, and an unreliable communication environment make this problem extremely challenging for small UAVs. The second application will be distributed fire perimeter monitoring where a team of UAVs is tasked to monitor the border of a forest fire. The nature of the environment only allows communication when the UAVs are in close vicinity of each other. Therefore, cooperation must be achieved with only infrequent communication. The third application will be that of cooperatively tracking and targeting a moving ground target when sensor occlusions are probable.

Biography: Randal W. Beard received the B.S. degree in electrical engineering from the University of Utah, Salt Lake City, in 1991, the M.S. degree in electrical engineering in 1993, the M.S. degree in mathematics in 1994, and the Ph.D. degree in electrical engineering in 1995, all from Rensselaer Polytechnic Institute, Troy, N.Y. Since 1996, he has been with the Electrical and Computer Engineering Department at Brigham Young University, Provo, UT, where he is currently a professor. In 1997 and 1998, he was a Summer Faculty Fellow at the Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA. In 2006-2007 he was a National Research Council Fellow at the Air Force Research Labs at Eglin Air Force Base, Fort Walton Beach, Florida, where he worked on vision based guidance and control algorithms for micro air vehicles.

His primary research focus is in autonomous systems, unmanned air vehicles, and multiple vehicle coordination and control. He has published over 40 journal articles and over 90 peer reviewed conference articles and has received funding from AFOSR, AFRL, NASA, DARPA, and NSF.

He is a senior member of the IEEE and the AIAA. He is an editor for the Journal of Intelligent and Robotics Systems, and an associate editor for the IEEE Control Systems Magazine. In 1998 and 2004 he was voted the outstanding teacher in the BYU Electrical and Computer Engineering Department by graduating seniors, and in 2002 he received the Outstanding Professor award from the BYU Electrical and Computer Engineering Department. In 2004 he was awarded the BYU Young Scholar Award and in 2006 he was awarded the BYU Technology Transfer Award. His students have won numerous competitions and awards for their work on micro air vehicles.

Awards

ACM SIGART Autonomous Agents Research Award

The ACM SIGART Autonomous Agents Research Award is an annual award for excellence in research in the area of autonomous agents. The award is intended to recognize researchers in autonomous agents whose current work is an important influence on the field. The award is an official ACM award, funded by an endowment created by ACM SIGART from the proceeds of previous Autonomous Agents conferences. Candidates for the award are nominated through an open nomination process.

The 2008 ACM SIGART Autonomous Agents Research Award recipient is **Yoav Shoham**.

Yoav Shoham is Professor of Computer Science at Stanford University, where he has been since receiving his PhD in Computer Science from Yale University in 1987 and spending an abbreviated post-doctoral position at the Weizmann Institute of Science. He has worked in various areas of AI, including temporal reasoning, nonmonotonic logics and theories of commonsense. Shoham's interest in recent years has been multiagent systems, and in particular the interaction between computer science and game theory. Shoham is a Fellow of the Association for Advancement of Artificial Intelligence (AAAI), and charter member of the International Game Theory Society. He is an author of four books, an editor of one, and an author of numerous articles. He is also a founder of several successful e-commerce software companies.

He will be presenting a plenary talk entitled **Computer Science and Game Theory**.

IFAAMAS Influential Paper Award

The International Foundation for Autonomous Agents and Multi-Agent Systems set up an influential paper award in 2006 to recognize publications that have made seminal contributions to the field. Such papers represent the best and most influential work in the area of autonomous agents and multi-agent systems. These papers might, therefore, have proved a key result, led to the development of a new sub-field, demonstrated a significant new application or system, or simply presented a new way of thinking about a topic that has proved influential. The award is open to any paper that was published at least 10 years before the award is made. The paper can have been published in any journal, conference, or workshop. The award was founded by the Agent Theories, Architectures and Languages Foundation.

This year, the award is shared by two papers:

M. E. Bratman, D. J. Israel, and M E. Pollack. (1988) "Plans and resource-bounded practical reasoning", *Computational Intelligence*, 4(4):349–355.

E. H. Durfee and V. R. Lesser (1991) "Partial Global Planning: A Coordination Framework for Distributed Hypothesis Formation", *IEEE Transactions on Systems, Man, and Cybernetics*, 21(5): 1167–1183.

In addition special recognition is given to the following paper which, not being a regular research paper, was not considered for the influential paper award.

M. Wooldridge and N. R. Jennings, (1995) "Intelligent Agents: Theory and Practice", *The Knowledge Engineering Review*, 10 (2): 115-152.

The IFAAMAS Victor Lesser Distinguished Dissertation Award

This award was started in 2007 and is named for Professor Victor Lesser, a long standing member of the AAMAS community who has graduated a large number of outstanding PhD students in the area. To be eligible for the 2008 award, a dissertation had to have been written as part of a PhD awarded in 2007, and had to be nominated by the supervisor with three supporting references. Selection is based on originality, depth, impact and written quality, supported by quality publications.

The 2008 IFAAMAS Victor Lesser Distinguished Dissertation Award recipient is **Radu Jurca** for the dissertation entitled "Truthful Reputation Mechanisms for Online Systems".

Pragnesh Jay Modi Best Student Paper Award

The Pragnesh Jay Modi Best Student Paper Award is made annually at the AAMAS conference to the paper that is judged to be the best paper at the conference whose main author is registered as a student at the time of paper submission. Typically the student is registered for a PhD, although undergraduate and masters student papers may also be considered. The winning paper may have multiple authors, not all required to be students, but to be eligible, the main author of the paper must be a student. The award is sponsored by the Autonomous Agents and Multi-Agent Systems journal and is named for Pragnesh Jay Modi (1975–2007), an active and influential member of the AAMAS research community who died tragically young in April 2007. Jay obtained his PhD from the University of Southern California in 2003, and at the time of his death was a junior Faculty member at Drexel University, Philadelphia. Jay's PhD thesis has been foundational in the area of distributed constraint optimization (DCOP), and among his many accomplishments were an NSF-CAREER award and IEEE Intelligent Systems magazine's award for "AI's 10 to watch".

Nominations for the award are made by Program Committee members, Senior Program Committee members and Program Chairs, with selection from a short-list being made by Senior Program Committee members.

Nominations for the 2008 Pragnesh Jay Modi Best Student Paper Award are:

- "Sensing-based Shape Formation on Modular Multi-Robot Systems: A Theoretical Study", Chih-Han Yu and Radhika Nagpal. (Multi-robots track)

- "Modeling Parallel and Reactive Empathy in Virtual Agents: An Inductive Approach". Scott Mc-Quiggan, Jennifer Robison, Robert Phillips, and James Lester. (Virtual agents track)

- "The Permutable POMDP: Fast Solutions to POMDPs for Preference Elicitation", Doshi Finale and Nicholas Roy.

- "Computing an Approximate Jam/Fold Equilibrium for 3-player No-Limit Texas Hold'em Tournaments", Sam Ganzfried and Tuomas Sandholm.

- "Anonymity-Proof Shapley Value: Extending Shapley Value for Coalitional Games in Open Environments", Naoki Ohta, Vincent Conitzer, Yasufumi Satoh, Atsushi Iwasaki, and Makoto Yokoo.

- "Approximate Predictive State Representations", Britton Wolfe, Michael James, and Satinder Singh.

The winner will be announced at the conference banquet.

Best Paper Award

This award is for a selected paper which does not have a student as primary author. Nominations are made by Program Committee members, Senior Program Committee members and Program Chairs, with selection from a short-list being made by Senior Program Committee members.

Nominations for 2008 best paper are:

- "SmartBody: Behavior Realization for Embodied Conversational Agents", Marcus Thiebaux, Andrew Marshall, Stacy Marsella, and Marcelo Kallmann. (Virtual agents track)

- "Cooperative Boolean Games", Paul Dunne, Sarit Kraus, Wiebe van der Hoek, and Michael Wooldridge.

- "Agent Communication in Ubiquitous Computing: the Ubismart Approach", Jurriaan van Diggelen, Robbert-Jan Beun, Rogier van Eijk, and Peter J. Werkhoven.

The winner will be announced at the conference banquet.

Best Industry Paper Award

Nominations for best industry paper award are:
- "WADE: A software platform to develop mission critical applications exploiting agents and workflows", Giovanni Caire, Danilo Gotta and Massimo Banzi
- "Cooperative search for optimizing pipeline operations", T. Mora, A.B. Sesay, J. Denzinger, H. Golshan, G. Poissant and C. Konecnik
- "Deployed ARMOR Protection: The Application of a Game Theoretic Model for Security at the Los Angeles International Airport", James Pita, Manish Jain, Janusz Marecki, Fernando Ordonez, Christopher Portway, Milind Tambe, Craig Western, Praveen Paruchuri and Sarit Kraus

The winner will be announced at the conference banquet.

Best Program Committee Member

Nominations for best program committee member are:
- Lars Braubach
- Renata Guizzardi
- Adrian Pearce
- Sebastian Sardina
- Pınar Yolum

The winner will be announced at the conference banquet.

Best Senior Program Committee Member

Nominations for best senior program committee member are:
- Stephen Cranefield
- Ed Durfee
- Ulle Endriss
- Maria Fasli

The winner will be announced at the conference banquet.

Other awards

Additional awards will be made to:
- Best academic software demo;

- Best industrial software demo; and

- Best robotic demo

All these awards will be announced at the conference banquet.

Internet Access

Wireless

From 12 to 16 May: Lobby and Galeria
From 14 to 16 May: Rooms I, II, XV and XVII

Network Name: ROOM

Use the following information on the opening page when accessing the network:
Username: MIRAGE
Password: 6830

Configuration is done via DHCP.

Ethernet

From 14 to 16 May: Rooms I, II, XV and XVII

Configuration is done via DHCP

Welcome Reception and Banquet Dinner

Welcome Reception

The welcome reception is going to be held at Lagoas Park Hotel. This reception was offered by Oeiras City Council, where Instituto Superior Técnico – Taguspark is located.

Buses for welcome reception leave Tuesday at **18:30** from hotel Miragem main entrance

Banquet Dinner

15 May – Thursday

With overwhelming Sintra's mountain range at the back and very close to the sea, with wonderful beaches all around, the town of Colares is absolutely delightful and has long been a very popular summer resort. Colares is also a demarcated wine-growing region, producing the very popular and increasingly rare Colares wine. The houses and imposing farms all around Colares affirm this wonderful relation with Wine and its production.

Adega de Colares

The banquet dinner will be held at Adega Regional of Colares. With more than a hundred years of history the Adega is still in use to host and age the famous Colares wine. The building has been completely restored according to the original plans and in the main hall the impressive enormous oak vats and barrels, some with capacity to hold more than 15 000 litres, give a very special atmosphere.

Buses for banquet dinner leave Thursday at **18:45 sharp** from hotel Miragem main entrance.

Banquet dinner is SOLD OUT!

Nearby Services

A- Hotel Miragem (conference site)
- Buffet – hot/cold dishes (€37,5)
B- Monte Estoril's Train Station (200m/220yd from hotel Miragem)
C- Cascais's Train Station (500m/550yd from hotel Miragem)
D- Shopping Mall Cascais Villa (500m/550yd from hotel Miragem)
- Restaurants:
  - Arroz com Todos (~ €5)
  - Companhia das Sandes (~ €5)
  - Chimarrão (~ €7.50 to €10)
  - Maison des Crêpes (~ € 3 to €6)
  - Big Bob's (~ €4)
  - Joshua's Shoarma (~ €5)
  - Só Peso (~ €6.50)
E- Pastelaria Gel Pizza (100m/110yd from hotel Miragem)
- Omelets (€4 to €5)
- Salads (€3 to €6)
F- Bird's Garden (150m/165yd from hotel Miragem)
- Post Office
- Several Banks
- Restaurant "Restaurante do Mar" (~ €7 to €12)
 G- BG Bar (200m/220yd from hotel Miragem)
- Sandwiches (2.40€ to 6€)
- Salads (7.50€ to 12€)
- Hamburgers (6€ to 7,5€)

- Fish (11€ to 14,5€)
- Meat (11€ to 21€)
 H- CIMAS – English Bar – Restaurant
   - Game: Roasted Partridage (€32) / Hare with Butter Beans (€26)
   - Eggs: Scrambled Eggs (€16)
   - Vegetables: Vegetables Panache (€24)
   - Fish: Baked Stone Bass (€30) / Salted CodFish (€22)
 I- Jonas Bar (Beach Bar)
   - Salads: Tuna (€7) / Natural (€7) / Sea (€10)
   - Sandwiches: Cheese (€3) / Smoked Salmon (€5)
   - Toasts (€1.60 to €5.50)
   - Omelets (€5 to €7.50)
   - Hamburguers (€6.00 to €8.50)
   - Fish: Robalo (Snook) (€12)
   - Meat: Picanha (€13)
 J- Bar do Pica (Beach Bar)
   - Omelets (€1.30 to €10.30)
   - Seafood (€13 to €32)
   - Hamburguers (€4.20 to €9.80)
   - Salads (€3.90 to €8.90)
   - Meat (€10.40 to €35)