# **AAMAS 2007 POSTER PROGRAM**

Wednesday, May 16

1:30 - 3:00 Poster Session 1 (88 posters)

# **Group a: Embodied Agents and Architectures**

"What can I do with this?" - Finding Possible Interactions between Characters and Objects

Pedro Sequeira, Marco Vala, and Ana Paiva

Aborting Tasks and Plans in BDI Agents

John Thangarajah, James Harland, David Morley, and Neil Yorke-Smith

**Evaluating a Conversation-Centered Interactive Drama** 

Manish Mehta, Steven Dow, Michael Mateas, and Blair MacIntyre

Goals in the Context of BDI Plan Failure and Planning

Sebastian Sardina and Lin Padgham

Automatic Annotation of Team Actions in Observations of Embodied Agents Linus Luotsinen, Hans Fernlund, and Ladislau Boloni

Agents that Remember Can Tell Stories: Integrating Autobiographic Memory into Emotional Agents

Wan Ching Ho, João Dias, Rui Figueiredo, and Ana Paiva

**EBDI: An Architecture for Emotional Agents** 

Hong Jiang, Jose Vidal, and Michael Huhns

Extending Character-based Storytelling with Awareness and Feelings david pizzi, Marc Cavazza, and Jean-Luc Lugrin

Approximate State Estimation in Multiagent Settings with Continuous or Large Discrete State Spaces

Prashant Doshi

Dynamic Movement and Positioning of Embodied Agents in Multiparty Conversations

Dusan Jan and David Traum

# Group b: Argumentation, Negotiation, and Partially Cooperative Systems Policy Recognition for Multi-Player Tactical Scenarios

Gita Sukthankar and Katia Sycara

Meta-Level Coordination for Solving Negotiation Chains in Semi-Cooperative Multi-Agent Systems

Xiaoqin Zhang and Victor Lesser

Emergence of Global Network Property based on Multi-agent Voting Model Kosuke Shinoda, Yutaka Matsuo, and Hideyuki Nakashima

Towards Self-Organizing Agent-based Resource Allocation in a Multi-Server Environment

Tino Schlegel and Ryszard Kowalczyk

Dynamics of Contracts-Based Organizations: A Formal Approach Based on Institutions

Yathiraj Udupi and Munindar Singh

**Arguing for Gaining Access to Information** 

Sylvie Doutre, Peter McBurney, Laurent Perrussel, and Jean-Marc Thévenin A unifying framework for multi-agent agreement problems

Kiran Lakkaraju and Les Gasser

Autonomous Nondeterministic Tour Guides: Improving Quality of Experience with TTD-MDPs

Andrew Cantino, David Roberts, and Charles Isbell

Strategic Delay in Bargaining

Pinata Winoto, Gordon McCalla, and Julita Vassileva

When Price Is Not Enough: Combining Logical and Numerical Issues in **Bilateral Negotiation** 

Azzurra Ragone, Tommaso Di Noia, Eugenio Di Sciascio, and Francesco M. Donini

## **Group c: Communications, Conversations, and Commitments**

**Dynamic Semantics for Agent Communication Languages** 

Michael Rovatsos

**Commitment and Extortion** 

Paul Harrenstein, Felix Brandt, and Felix Fischer

**Enacting Protocols by Commitment Concession** 

Pinar Yolum and Munindar Singh

Temporal Linear Logic as a Basis for Flexible Agent Interactions

Duc Pham and James Harland

**Choice and Interoperation in Protocol Enactment** 

Amit Chopra and Munindar Singh

Joint Conversation Specification and Compliance

Shamimabi Paurobally and Michael Wooldridge

**Designing Protocols for Agent Institutions** 

Huib Aldewereld, Frank Dignum, and John-Jules Meyer

**Deriving Agent-Centred Representations of Protocols Described Using** 

**Propositional Statecharts** 

Hywel Dunn-Davies and Jim Cunningham

**Toward Verifying Commitment Protocols and their Compositions** 

Nirmit Desai, Zhengang Cheng, Amit Chopra, and Munindar Singh

Interactive Dynamic Influence Diagrams

Kyle Polich and Piotr Gmytrasiewicz

A Component Based Approach to Standardising Agent Communication

Frank Guerin and Wamberto Vasconcelos

Computing effective communication policies in multiagent systems Doran Chakraborty and Sandip Sen

#### Group d: Multiagent Learning

Transfer via Inter-Task Mappings in Policy Search Reinforcement Learning Matthew Taylor, Shimon Whiteson, and Peter Stone

Multiagent Reinforcement Learning and Self-Organization in a Network of Agents

Sherief Abdallah and Victor Lesser

SMILE: Sound Multiagent Incremental LEarning ;-)

Gauvain Bourgne, Henry Soldano, and Amal El Fallah-Seghrouchni

Theoretical Advantages of Lenient Q-learners: An Evolutionary Game Theory **Perspective** 

Liviu Panait and Karl Tuyls

Reducing the Complexity of Multiagent Reinforcement Learning *Andriy Burkov and Brahim Chaib-draa* 

Parallel Reinforcement Learning with Linear Function Approximation Matthew Grounds and Daniel Kudenko

Multiagent Learning in Adaptive Dynamic Systems

Andriy Burkov and Brahim Chaib-draa

Regret Based Dynamics: Convergence in Weakly Acyclic Games Jason Marden, Gurdal Arslan, and Jeff Shamma

**Sharing Experiences to Learn User Characteristics in Dynamic Environments with Sparse Data** 

David Sarne and Barbara J. Grosz

Reinforcement Learning in Extensive Form Games with Incomplete

Information: the Bargaining Case Study

Alessandro Lazaric, Enrique Munoz de Cote, Nicola Gatti, and Marcello Restelli

# **Group e: Applications and Computational Environments**

A Reinforcement Learning Based Distributed Search Algorithm for Hierarchical Peer-to-Peer Information

Haizheng Zhang and Victor Lesser

Estimating Information Value in Collaborative Multi-Agent Planning Systems

David Sarne and Barbara J. Grosz

Information Searching and Sharing in Large-Scale Dynamic Networks George A. Vouros

Modeling the Provenance of Data in Autonomous Systems
Simon Miles, Steve Munroe, Michael Luck, and Luc Moreau

A Methodology for 3D Electronic Institutions

Anton Bogdanovych, Marc Esteva, Simeon Simoff, Carles Sierra, and Helmut Berger

An Advanced Bidding Agent for Advertisement Selection on Public Displays Alex Rogers, Esther David, Terry Payne, and Nick Jennings

An Incentive Mechanism for Message Relaying in Unstructured Peer-to-Peer Systems

Cuihong Li, Bin Yu, and Katia Sycara

**Bidding Optimally in Concurrent Second-Price Auctions of Perfectly Substitutable Goods** 

Enrico Gerding, Rajdeep Dash, David Yuen, and Nick Jennings

Overlay Networks for Task Allocation and Coordination in Dynamic Large-Scale Networks of Cooperative Agents

Christina Theocharopoulou, Ioannis Partsakoulakis, George A. Vouros, and Konstantinos Stergiou

Collaboration among a Satellite Swarm

Grégory Bonnet and Catherine Tessier

Solving Large TAEMS Problems Efficiently by Selective Exploration and Decomposition

Jianhui Wu and Edmund Durfee

#### **Group f: Cognitive Models for Agents**

Cognitive and Social Simulation of Criminal Behavior Tibor Bosse, Charlotte Gerritsen, and Jan Treur Interactions between Market Barriers and Communication Networks in Marketing Systems

lan Durbach and Jan Hofmeyr

Realistic Cognitive Load Modeling for Enhancing Shared Mental Models in Human-Agent Collaboration

Xiaocong Fan and John Yen

A Computational Model of Human Interaction and Planning for Heterogeneous Multi-Agent Systems

Alexandre Pauchet, Nathalie Chaignaud, Amal El Fallah-Seghrouchni Forming and Scaffolding Human Coalitions with a Multiagent Framework Leen-Kiat Soh, Nobel Khandaker

Multiagent Based Construction for Human-like Architecture Yifeng ZENG, Dennis Plougman Buus, Jorge Cordero Hernandez

# Group g: Mechanism Design

Coalition Formation under Uncertainty: Bargaining Equilibria and the Bayesian Core Stability Concept

Georgios Chalkiadakis, Evangelos Markakis, and Craig Boutilier Eliciting Single-Peaked Preferences Using Comparison Queries

Vincent Conitzer

On the Robustness of Preference Aggregation in Noisy Environments Ariel Procaccia, Jeffrey Rosenschein, and Gal Kaminka

Requirement Driven Agent Collaboration based on Automated Mechanism Design

Liwei Zheng and Zhi Jin

**Constraint Satisfaction Algorithms for Graphical Games** 

Vishal Soni, Satinder Singh, and Michael Wellman

**Factoring Games to Isolate Strategic Interactions** 

George Davis, Michael Benisch, Kathleen Carley, and Norman Sadeh

Sequential Decision Making in Parallel Two-Sided Economic Search

David Sarne and Teijo Arponen

# **Group h: Cooperation, Coordination, and Teamwork**

Determining Confidence When Integrating Contributions from Multiple Agents Raphen Becker and Dan Corkill

**Exploiting Factored Representations for Decentralized Execution in Multiagent Teams** 

Maayan Roth, Reid Simmons, Manuela Veloso

**Towards Collaborative Task & Team Maintenance** 

Gal Kaminka, Ari Yakir, Dan Erusalimchik, and Nirom Cohen-Nov Agent Coordination by Trade-off between Locally Diffusion Effects and

Socially Structural Influences

Yichuan Jiang, Jiuchuan Jiang, and Toru Ishida

Provisioning Heterogeneous and Unreliable Providers for Service Workflows Sebastian Stein, Nick Jennings, and Terry Payne

The effect of task and environment factors on M.A.S. coordination and reorganization

Mattijs Ghijsen, Wouter Jansweijer, and Bob Wielinga

ARTS: Agent-oriented Robust Transactional System

Mingzhong Wang, Amy Unruh, and Ramamohanarao Kotagiri

**Distributed Management of Flexible Times Schedules** 

Stephen Smith, Anthony Gallagher, Terry Zimmerman, Laura Barbulescu, and Zack Rubinstein

Commitment-Driven Distributed Joint Policy Search Stefan Witwicki and Edmund Durfee

**Distributed Task Allocation in Social Networks** 

Mathijs de Weerdt, Yingqian Zhang, and Tomas Klos

Towards a Logical Theory of Coordination and Joint Ability

Hojjat Ghaderi, Hector Levesque, and Yves Lesperance Implementing the Maximum of Monotone Algorithms

Liad Blumrosen

# **Group i: Formal Models of Agency**

An Adversarial Environment Model for Bounded Rational Agents in Zero-Sum Interactions

Inon Zuckerman, Sarit Kraus, Jeffrey Rosenschein, and Gal Kaminka Incentive Compatible Ranking Systems

Alon Altman and Moshe Tennenholtz

Reasoning about Judgment and Preference Aggregation

Thomas Ågotnes, Wiebe van der Hoek, and Michael Wooldridge

Programming and Simulation of Quantum Search Agents

Matthias Klusch and René Schubotz

A Quantified Epistemic Logic for Reasoning about Multi-Agent Systems Francesco Belardinelli and Alessio Lomuscio

A General Framework for Reasoning about Rational Agents
Wojtek Jamroga and Nils Bulling

## **Group j: Societal Aspects**

A Formal Road from Institutional Norms to Organizational Structures

Davide Grossi, Frank Dignum, and John-Jules Meyer

Distributed Norm Management in Regulated Multi-Agent Systems

Dorian Gaertner, Andres Garcia-Camino, Pablo Noriega, Juan Antonio
Rodriguez-Aguilar, and Wamberto Vasconcelos

Resolving Conflict and Inconsistency in Norm-Regulated Virtual Organizations Wamberto Vasconcelos, Martin Kollingbaum, and Timothy Norman

Friends No More: Norm Enforcement in Multi-Agent Systems

Adrian Perreau de Pinninck, Carles Sierra, and Marco Schorlemmer

# Thursday, May 17

# 1:30 - 3:00 Poster Session 2 (92 posters)

## Group a: Multiagent Learning

A Framework for Agent-Based Distributed Machine Learning and Data Mining Jan Tozicka, Michael Rovatsos, and Michael Pechoucek

Automatic Feature Extraction for Autonomous General Game Playing Agents

David Kaiser

Batch Reinforcement Learning in a Complex Domain Shivaram Kalyanakrishnan and Peter Stone

Model-Based Function Approximation in Reinforcement Learning Nicholas Jong and Peter Stone

Aggregation in multi-agent systems and the problem of truth-tracking Pigozzi Gabriella and Stephan Hartmann

Adapting in Agent-Based Markets: A Study from TAC SCM David Pardoe and Peter Stone

Reinforcement Learning with Utility-aware Agents for Market-based Resource Allocation

Eduardo Gomes and Ryszard R. Kowalczyk

Towards Reinforcement Learning Representation Transfer Matthew Taylor and Peter Stone

## **Group b: Auctions and Electronic Markets**

A Winner Determination Algorithm for Auction-Based Decentralized Scheduling

Chun Wang, Hamada Ghenniwa, and Weiming Shen

Bidding Algorithms for a Distributed Combinatorial Auction Benito Mendoza and Jose Vidal

Outperforming the Competition in Multi-Unit Sealed Bid Auctions loannis Vetsikas and Nick Jennings

Winner Determination for Mixed Multi-unit Combinatorial Auctions via Petri Nets

Andrea Giovannucci, Juan Antonio Rodriguez-Aguilar, Jesus Cerquides, and Ulle Endriss

Average-Case Tractability of Manipulation in Elections via the Fraction of Manipulators

Ariel Procaccia and Jeffrey Rosenschein

Marked-Driven Agents with Uncertain and Dynamic Outside Options Fenghui Ren, Kwang Mong Sim, and Minjie Zhang

Infinitesimal Nash Transfers for Resource Allocation in Strong Social Alliances

Paul-Amaury Matt and Francesca Toni

An Incentive Mechanism for Eliciting Fair Ratings of Sellers in E-Marketplaces Jie Zhang and Robin Cohen

A Service-Oriented Marketplace approach for Next Generation Service Infrastructures

Donna Griffin and Dirk Pesch

# Online Auctions for Bidders with Interdependent Values Florin Constantin, Takayuki Ito, and David Parkes

# **Group c: Distributed Constraint Processing**

A Complete Distributed Constraint Optimization Method for Non-Traditional Pseudotree Arrangements

James Atlas and Keith Decker

Optimal On-line Scheduling in Stochastic Multi-Agent Systems in Continuous Space and Time

Wim Wiegerinck, Bart van den Broek, and Hilbert Kappen

Robust Coordination to Sustain Throughput of an Unstable Agent Network Rajesh Gautam and Kazuo Miyashita

Sequential Resource Allocation in Multi-agent Systems with Uncertainties Jianhui Wu and Edmund Durfee

Periodic Real-Time Resource Allocation for Teams of Progressive Processing Agents

dibangoye gilles, Mouaddib Abdel-Illah, and Brahim Chaib-draa

Reciprocal Negotiation Over Shared Resources in Agent Societies Sabyasachi Saha and Sandip Sen

Unifying Distributed Constraint Algorithms in a BDI Negotiation Framework

Bao Chau Le Dinh and Kiam Tian Seow

Matrix-Based Representation for Coordination Fault Detection: A Formal Approach

Meir Kalech, Michael Lindner, and Gal Kaminka

Distributed Constraint Propagation for Diagnosis of Faults in Physical Processes

Ana Bazzan and Bruno Silva

#### Group d: Multiagent Planning

Distributed Path Planning for Mobile Robots using a Swarm of Interacting Reinforcement Learners

Christopher Vigorito

Dynamics Based Control with an Application to Area-Sweeping Problems Zinovi Rabinovich, Jeffrey Rosenschein, and Gal Kaminka

**Graph-Based Multi-agent Replanning Algorithm** 

Jian Feng Zhang, Xuan Thang Nguyen, and Ryszard Kowalczyk

Towards a Formal Framework for Multi-Objective Multi-Agent Planning Mouaddib Abdel-Illah, Boussard Matthieu, and Bouzid Maroua

Knowledge and Observations in the Situation Calculus

Ryan Kelly and Adrian Pearce

Conflict Estimation of Abstract Plans for Multi-Agent Systems

Toshiharu Sugawara, Satoshi Kurihara, Toshio Hirotsu, Kensuke Fukuda,

Diagnosis of plan step errors and plan structure violations

Nico Roos, Cees Witteveen, Adriaan ter Mors, and Xiaoyu Mao

**Integrating Motivation with Planning** 

Alexandra Coddington

and Toshihiro Takada

# Group e: Environments and Implementation Techniques Implementing Commitment-Based Interactions Michael Winikoff

**Normative System Games** 

Thomas Ågotnes, Wiebe van der Hoek, and Michael Wooldridge

**Operational Semantics of Multiagent Interactions** 

Juan Manuel Serrano and Sergio Saugar

**Modular Interpreted Systems** 

Thomas Agotnes and Wojtek Jamroga

A Platform for Massive Agent-based Simulation and its Evaluation

Gaku Yamamoto, Hideki Tai, and Hideyuki Mizuta

The IRM4S model: the Influence/Reaction principle for multiagent based simulation

Fabien Michel

A WSA-Based Architecture for Building Multi-Agent Systems

Aluizio Haendchen Filho, Hércules do Prado, and Carlos J. P. de Lucena Mass Programmed Agents for Simulating Human Strategies in Large Scale Systems

Michal Chalamish, David Sarne, and Sarit Kraus

Breaking into industry: tool support for multiagent systems

Simon Lynch and Keerthi Rajendran

Deterministic Nonlinear Modeling of Ant Algorithm with Logistic Multi-Agent System

Rodolphe Charrier, François Charpillet, and Christine Bourjot

**Practical Extensions in Agent Programming Languages** 

Mehdi Dastani, Dirk Hobo, and John-Jules Meyer

Predictive Fault Tolerance in Multi-Agent Systems: a Plan-Based Replication Approach

Alessandro Almeida, Samir Aknine, Jean-Pierre Briot, and Jacques Malenfant

Filters for Semantic Service Composition in Service-oriented Multiagent Systems

Alberto Fernández and Sascha Ossowski

Towards Reflective Mobile Agents for Resource-Constrained Mobile Devices Conor Muldoon, Gregory O'Hare, and John Bradley

**Prediction Horizons in Polyagent Models** 

Van Parunak, Ted Belding, and Sven Brueckner

**Towards Simulating Billions of Agents in Thousands of Seconds** 

I. V. Aprameya Rao, Manish Jain, and Kamalakar Karlapalem

Building Small-Worlds in Unstructured p2p Networks Using a Multi-Agent Bayesian Inference Mechanism

Prithviraj Dasgupta

#### Group f: Formal Models of Agency

A Temporal Epistemic Logic with a Reset Operation

Alessio Lomuscio and Bozena Wozna

Agents, Beliefs, and Plausible Behavior in a Temporal Setting

Nils Bulling and Woitek Jamroga

A Grounded Specification Language for Agent Programs

Mehdi Dastani, M. Birna van Riemsdijk, and John-Jules Meyer

**Contextual Deliberation of Cognitive Agents in Defeasible Logic** 

Guido Governatori, Mehdi Dastani, Antonino Rotolo, Insu Song, and Leendert van der Torre

A Design Framework for Generating BDI-agents from Goal Models

Loris Penserini, Anna Perini, Angelo Susi, Mirko Morandini, and John Mylopoulos

The A&A Approach for Developing Cognitive MAS: Conceptual Framework and Prototyping Technologies

Alessandro Ricci, Mirko Viroli, and Andrea Omicini

From Desires to Intentions through Dialectical Analysis

Nicolás Rotstein, Alejandro García, and Guillermo Simari

Convergence and Rate of Convergence of a Simple Ant Model

Amine Boumaza and Bruno Scherrer

**Delegation and Mental States** 

Emiliano Lorini, Nicolas Troquard, Andreas Herzig, and Cristiano Castelfranchi

Model-Based Belief Merging without Distance Measures Verónica Borja and Pilar Pozos

# Group g: Argumentation and Negotiation

A Multilateral Multi-Issue Negotiation Protocol

Miniar Hemaissia, Amal El Fallah-Seghrouchni, Christophe Labreuche, and Juliette Mattioli

**Approximate and Online Multi-Issue Negotiation** 

Shaheen Fatima, Michael Wooldridge, and Nick Jennings

A Randomized Method for the Shapley Value for the Voting Game Shaheen Fatima, Michael Wooldridge, and Nick Jennings

A Unified and General Framework for Argumentation-Based Negotiation

Leila Amgoud, Yannis Dimopoulos, and Pavlos Moraitis

**Learning and Joint Deliberation through Argumentation in Multi-Agent Systems** 

Santiago Ontanon and Enric Plaza

**Arguing and Explaining Classifications** 

Leila Amgoud and Mathieu Serrurier

Searching for Joint Gains in Automated Negotiations Based on Multi-Criteria Decision Making Theory

Bao Vo and Lin Padgham

### **Group h: Social Aspects**

Dynamically Learning Sources of Trust Information: Experience vs. Reputation Karen Fullam and K. Suzanne Barber

Rumors and Reputation: Evaluating Multi-Dimensional Trust within a Decentralized Reputation System

Steven Reece, Alex Rogers, Stephen Roberts, and Nick Jennings

**Presumptive Selection of Trust Evidence** 

Pierpaolo Dondio and Stephen Barrett

Agent-based Model of Impact of Socioeconomic Stressors: A DYNAMIC Network Perspective

Shah Jamal Alam, Ruth Meyer, and Emma Norling

Reducing the complexity of logics for multiagent systems

Marcin Dziubinski, Rineke Verbrugge, and Barbara Keplicz

A Model of a Trust-Based Recommendation System on a Social Network Frank Walter, Stefano Battiston, and Frank Schweitzer

Strategy Recommender Agents (ALEX)-The Methodology

Ronald Ruiz Ordoñez, Josep Lluis de la Rosa I Esteva, and Javier Guzman-Obando

InterPol: A Policy Framework for Managing Trust and Privacy in Referral Networks

Yathiraj Udupi and Munindar Singh

SSDPOP: Improving the Privacy of DCOP with Secret Sharing Rachel Greenstadt, Michael Smith, and Barbara J. Grosz

Towards Provably Secure Trust and Reputation Systems in E-Marketplaces Reid Kerr and Robin Cohen

Mechanisms for Norm Emergence in Multi-Agent Societies

Bastin Tony Roy Savarimuthu, Maryam Purvis, Stephen Cranefield, and
Martin Purvis

Social Comparison in Crowds: A Short Report Gal Kaminka and Natalie Fridman

Socially Embedded Multi Agent Based Simulation of Financial Market Kiyoshi Izumi, Hiroki Matsui, and Yutaka Matsuo

Robust Methods for Tracking Intelligent Agents Playing in an Artificial Financial Market

Nachi Gupta, Raphael Hauser, and Neil Johnson

Preservation of Obligations in a Temporal and Deontic Framework

Jan Broersen and Julien Brunel

Integrating Authority, Deontics, and Communications within a Joint Intention Framework

Marcus Huber, Sanjeev Kumar, David McGee, and Sean Lisse

Making Social Choices from Individuals' CP-nets

Keith Purrington and Edmund Durfee

**Reputation in the Joint Venture Game** 

Philip Hendrix and Barbara J. Grosz

#### **Group i: Applications and Computational Environments**

An Efficient Heuristic Approach for Security against Multiple Adversaries Praveen Paruchuri, Jonathan Pearce, Milind Tambe, Fernando Ordonez, and Sarit Kraus

An Agent-Based Approach for Privacy-Preserving Recommender Systems Richard Cissee and Sahin Albavrak

On the Benefits of Cheating by Self-Interested Agents in Vehicular Networks Raz Lin, Sarit Kraus, and Yuval Shavitt

Physics Inspired Multiagent Model for Vehicle Platooning

Jean-Michel Contet, Franck Gechter, Pablo Gruer, and Abder Koukam

Towards Valuation-Aware Agent-Based Traffic Control Heiko Schepperle, Klemens Böhm, and Simone Forster

# 1:30 - 3:00 Poster Session 3 (75 posters)

# Group a: Perceptual and Embedded Agents

IFSA: Incremental Feature-Set Augmentation

Mazda Ahmadi, Matthew Taylor, and Peter Stone

On Discovery and Learning of PSR Models for Agents with Continuous Actions and Observations

**David Wingate and Satinder Singh** 

Speeding Up Moving-Target Search

Sven Koenig, Maxim Likhachev, and Xiaoxun Sun

**Towards Using Multiple Cues for Robust Object Recognition** 

Sarah Aboutalib and Manuela Veloso

# **Group b: Mechanism Design and Game Theory**

A Computational Characterization of Multiagent Games with Fallacious Rewards

Ariel Procaccia and Jeffrey Rosenschein

A Near-Optimal Strategy for a Heads-Up No-Limit Texas Hold'em Poker Tournament

Peter Bro Miltersen and Troels Bjerre Sørensen

Better Automated Abstraction Techniques for Imperfect Information Games, with Application to Texas HoldEm

Andrew Gilpin and Tuomas Sandholm

Empirical Game-Theoretic Analysis of the TAC Supply Chain Game

Patrick Jordan, Christopher Kiekintveld, and Michael Wellman

**An Adaptive Strategy for Minority Games** 

Ka-man Lam and Ho-fung Leung

Routing Games with an Unknown Set of Active Players

Ashlagi Itai, Monderer Dov. and Moshe Tennenholtz

Requirement Driven Agent Collaboration based on Automated Mechanism Design

Liwei Zheng and Zhi Jin

**Coalition Structure Generation with Worst Case Guarantees Based on Cardinality Structure** 

She-Xiong Su, Shan-Li Hu, and Chun-Yi Shi

**Approval Voting: Local Search Heuristics and Approximation Algorithms for the Minimax Solution** 

Rob LeGrand, Evangelos Markakis, and Aranyak Mehta

#### Group c: Cooperative Distributed Problem Solving

A Globally Optimal Algorithm for TTD-MDPs

Sooraj Bhat, David Roberts, Mark Nelson, Charles Isbell, and Michael Mateas

A Q-Decomposition and Bounded RTDP Approach to Resource Allocation Plamondon Pierrick, Brahim Chaib-draa, and Abder Rezak Benaskeur Combinatorial Resource Scheduling for Multiagent MDPs Dmitri Dolgov, Michael James, and Michael Samples

Organizational Self-Design in Semi-dynamic Environments
Sachin Kamboj and Keith Decker

DisLRP $_{\alpha}$ :  $\alpha$ -approximation in Generalized Mutual Assignment *Katsutoshi Hirayama* 

A Swarm Based Approximated Algorithm to the Extended Generalized Assignment Problem (E-GAP)

Paulo Ferreira Jr., Felipe Boffo, and Ana Bazzan

A Statistical Decision-Making Model for Choosing between Multiple Alternatives

Shulamit Reches, Shavit Talman, and Sarit Kraus

Dynamic Task Allocation within an Open Service-Oriented MAS Architecture Ivan Jureta, Stephane Faulkner, Youssef Achbany, and Marco Saerens Managing the Pedigree and Quality of Information in Dynamic Information Sharing Environments

Bin Yu, Srikanth Kallurkar, Ganesh Vaidyanathan, and Donald Steiner Understanding Decentralised Control of Resource Allocation in a Minimal Multi-Agent System

Mariusz Jacyno, Seth Bullock, Michael Luck, and Terry Payne
Developing MAS with Automatic Agent Generation and Dynamic Task
Allocation Mechanisms

Xiaogin Zhang, Haiping Xu, and Bhavesh Shrestha

Building coalitions Involving Agents and Humans: Reports from Agent-Based Participatory Simulations

Paul Guyot and Shinichi Honiden

Multi-task Overlapping Coalition Parallel Formation Algorithm

Chao-feng Lin and Shan-Li Hu

Agents that Collude to Evade Taxes

Luis Antunes, Joao Balsa, and Helder Coelho

Achieving Cooperation among Selfish Agents in the Air Traffic Management Domain using Signed Money

Geert Jonker, Frank Dignum, and John-Jules Meyer

An Event-Driven Approach for Agent-Based Business Process Enactment Payal Chakravarty and Munindar Singh

**Executing Multi-Robot Cases through a Single Coordinator** 

Raquel Ros and Manuela Veloso

**Distributed Coordination in Uncertain Multiagent Systems** 

Rajiv Maheswaran, Craig Rogers, Romeo Sanchez, and Pedro Szekely

On Agent Based Quantum Matchmaking

Matthias Klusch

# **Group d: Multiagent Planning**

Graphical Models for Online Solutions to Interactive POMDPs

Prashant Doshi, Yifeng Zeng, and Qiongyu Chen

Letting Loose a SPIDER on a Network of POMDPs: Generating Quality Guaranteed Policies

Pradeep Varakantham, Janusz Marecki, Milind Tambe, and Makoto Yokoo On Opportunistic Techniques for Solving Decentralized MDPs with Temporal Constraints

Janusz Marecki and Milind Tambe

**Q-value Functions for Decentralized POMDPs** 

Frans Oliehoek and Nikos Vlassis

Utility-Based Plan Recognition: An Extended Abstract

Dorit Avrahami-Zilberbrand and Gal Kaminka

Planning and Defeasible Reasonning

Diego Garcia, Alejandro García, and Guillermo Simari

Distributed Intrusion Detection in Partially Observable Markov Decision Processes

Doran Chakraborty and Sandip Sen

Subjective Approximate Solutions for Decentralized POMDPs

Anton Chechetka and Katia Sycara

Modeling Plan Coordination in Multiagent Decision Processes Ping Xuan

### Group e: Ontologies

A Formal Model for Situated Semantic Alignment

Manuel Atencia and Marco Schorlemmer

A Multi-Agent System for Building Dynamic Ontologies

Kévin Ottens, Marie-Pierre Gleizes, and Pierre Glize

**Argumentation over Ontology Correspondences in MAS** 

Loredana Laera, lan Blacoe, Valentina Tamma, Terry Payne, Jérôme Euzenat, and Trevor Bench-Capon

Learning Consumer Preferences Using Semantic Similarity

Reyhan Aydogan and Pinar Yolum

**Cooperative Evolution of Service Ontologies** 

Murat Sensoy and Pinar Yolum

An Ontology-Based Approach to Interoperability for Bayesian Agents

Elder Santos, Moser Fagundes, and Rosa Vicari

Models: An Experience on ART Testbed

Anarosa Brandão, Laurent Vercouter, Sara Casare, and Jaime Sichman

#### Group f: Agent Learning, Evolution, and Emergent Behavior

**Using Priorities to Simplify Behavior Coordination** 

Brent Eskridge and Dean Hougen

**Advice Taking in Multiagent Reinforcement Learning** 

Michael Rovatsos and Alexandros Belesiotis

**Confidence-Based Policy Learning from Demonstration Using Gaussian** 

**Mixture Models** 

Sonia Chernova and Manuela Veloso

Forecasting Market Prices in a Supply Chain Game

Christopher Kiekintveld, Jason Miller, Patrick Jordan, and Michael Wellman

**Conditional Random Fields for Activity Recognition** 

Douglas Vail, Manuela Veloso, and John Lafferty

**Effective Tag Mechanisms for Evolving Coordination** 

Sandip Sen and Matt Matlock

Self-Organizing Social and Spatial Networks under What-if Scenarios

II-Chul Moon and Kathleen Carley

## **Group g: Argumentation and Negotiation**

Children in the Forest: towards a canonical problem of spatio-temporal collaboration

Yi Luo and Ladislau Boloni

Hypotheses Refinement under Topological Communication Constraints Gauvain Bourgne, Gael Hette, Nicolas Maudet, and Suzanne Pinson

On the Relevance of Utterances in Formal Inter-agent Dialogues

Simon Parsons, Peter McBurney, Elizabeth Sklar, and Michael Wooldridge

A Generative Inquiry Dialogue System

Elizabeth Black and Anthony Hunter

**Negotiation by Abduction and Relaxation** 

Chiaki Sakama and Katsumi Inoue

The LOGIC Negotiation Model

Carles Sierra and John Debenham

Multi-Agent Information System Using Mobile Agent Negotiation Based on a Flexible Transport Ontology

Hayfa Zgaya and Slim Hammadi

Negotiation Partners Selection Mechanism Based on Context-Dependent Similarity Relations

Jakub Brzostowski and Ryszard Kowalczyk

A Pareto Optimal Model for Automated Multi-attribute Negotiations

Guoming Lai, Katia Sycara, and Cuihong Li

Exchanging Reputation Values among Heterogeneous Agent Reputation Using Iterative Narrowing to Enable Multi-Party Negotiations with Multiple Interdependent Issues

Hiromitsu Hattori, Mark Klein, Takayuki Ito

AutoMed -- An Automated Mediator for Bilateral Negotiations under Time Constraints

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