

List of Extended Abstracts

“RED” Session

Wednesday 12 May, 16.00 – 18.00

R-1: Closing the Learning-Planning Loop with Predictive State Representation

Byron Boots, Sajid Siddiqi, Geoffrey Gordon

R-2: An Approach to Integrate Web Services and Argumentation into a BDI System

Federico Schlesinger, Marcelo Errecalde, Guillermo Aguirre

R-3: A Semiotic Perspective for Multiagent Systems Development

Sara Casare, Anarosa Brandão, Jaime Sichman

R-4: Requesting Agent Participation on Electronic Institutions

Hector Ceballos, Pablo Noriega, Franciscu Cantu

R-5: ClassroomWiki: A Wiki for the Classroom with Multiagent Tracking, Modelling, and Group Formation

Noble Khandaker, Leen-Kiat Soh

R-6: Accomodating Driver Preferences in Reservation-based Urban Traffic Management

Matteo Vasirani, Sascha Ossowski

R-7: Distributed Abductive Reasoning with Constraints

Jiefei Ma, Alessandra Russo, Krysia Broda, Emil Lupu

R-8: A BDI Architecture for Normative Decision Making

Natalia Criado, Estefanía Argente, Vicent Botti

R-9: The Multi Variable Multi Constrained Distributed Constraint Optimization Network

Christopher Portway, Edmund Durfee

R-10: Make Optimality and Uniqueness in Stable Marriage Problems with Partial Orders

Mirco Gelain, Maria Silvia Pini, Francesca Rossi, Kristen Brent Venable, Toby Walsh

R-11: Approximate Planning for Decentralised MDPs with Sparse Interactions

Francisco Melo, Manuela Veloso

R-12: Searching for a k-Clique in Unknown Graphs

Roni Stern, Meir Kalech, Ariel Fefner

R-13: Quasi Deterministic POMDPs and DecPOMDPs

Camille Besse, Brahim Chaib-draa

R-14: A Mean-based Approach for Real-Time Planning

Damien Pellier, Bruno Bouzy, Marc Métivier

R-15: From Policies to Influences: A Framework For Nonlocal Abstraction In Transition-dependent Dec-POMDPs Agents

Stefan Witwicki, Ed Durfee

R-16: Using Bisimulation for Policy Transfer in MDPs

Pablo Castro, Doina Precup

R-17: The Practical Advantage of Surprise-based Agents

Luis Macedo

R-18: Improve Bounded Model Checking for a Fair Branching-Time Temporal Epistemic Logic
Xiaowei Huang, Cheng Luo, Ron van der Meyden

R-19: Graphically Explaining Norms
Madalina Croitoru, Nir Oren, Simon Miles, Michael Luck

R-20: Occlusion-aware Multi-UAV Surveillance
Eduard Semsch, Michal Jakob, Dusan Pavlicek, Michal Pechoucek

R-21: Identifying and Utilizing Subgroup Coordination Patterns in Team Adversarial Games
Kennard Lavers, Gita Sukthankar

R-22: Anytime Dynamic Programming for Coalition Structure Generation
Travis Service, Julie Adams

R-23: Efficient Multi-Agent Coordination using Resource-Aware Junction Trees
Nicolas Stefanovitch, Alessandro Farinelli, Alex Rogers, Nick Jennings

R-24: A Game Theoretic Approach to Decentralised Multi-Project Scheduling
Tony Wauters, Katja Verbeerck, Patrick de Causmaecker, Greet Vanden Berghe

R-25: Improving the Efficiency of the Distributed Stochastic Algorithm
Melanie Smith, Roger Mailler

R-26: Collaborative Multiagent Gaussian Inference in a Dynamic Environment Using Belief Propagation
Stefano Ermon, Carla Gomes, Bart Selman

R-27: Partitioning the Multiagent Simple Temporal Problem for Concurrency and Privacy
James Boerkoel, Edmund Durfee

R-28: Market-based Risk Allocation for Multi-Agent Systems
Masahiro Ono, Brian Williams

R-29: Asynchronous Partitioning Framework
Vitaliy Freidovich, Amnon Meisels

R-30: Biologically Inspired Coalition Formation of Multi-Agent Systems
Musad Haque, Amir Rahmani, Magnus Egerstedt

R-31: Distributed Clustering for Group Formation and Task Allocation
Daniela Santos, Ana Bazzan

R-32: Convention Emergence Through Spreading Mechanisms
Norman Salazar, Juan Antonio Rodriguez-Aguilar, Josep Ll. Arcos

R-33: Multi-humoroid: Joking System that Reacts with Humor to Humans'bad Moods
Pawel Dybala, Michal Ptaszynski, Rafal Rzepka, Kenji Araki

R-34: MARIONET: Motion Acquisition for Robots through Iterative Online Evaluative Training
Adam Setapen, Michael Quinlan, Peter Stone

R-35: Automation of Social Networks with QA Agents

Albert Trias i Mansilla, Josep Lluís de la Rosa, Boris Galitski, Gabor Dobrocsi

R-36: Taking Turns in General Sum Markov Games

Peter Vranca, Katja Verbeeck, Ann Nowe

R-37: Robot Coordination with Ad-hoc Team Formation

Matt Knudson, Kagan Tumer

R-38: A Formal Approach to MASQ

Razvan Dinu, Tiberiu Stratulat, Jacques Ferber

R-39: Using Stereotypes to Understand One's Interactive Partner

Alan Wagner

R-40: Logic of Information Flow on Communication Channels

Yanjing Wang, Floor Sietsma, Jan van Eijck

R-41: Runtime Monitoring of Contract Regulated Web Services

Alessio Lomuscio, Wojciech Penczek, Monika Solanki, Maciej Szreter

R-42: Iterative Expanding Search in Multi-Agent Systems

David Sarne, Simon Shamoun, Eli Rata

R-43: How to Protect a City: strategic Security Placement in Graph-Based Domains

Jason Tsai, Zhengyu Yin, Jun-young Kwak, David Kempe, Christopher Kiekintveld, Milind Tambe

R-44: Sharing a Reward Based on Peer Evaluations

Artur Carvalho, Kate Larson

R-45: Representing Bayesian Games without a Common Prior

Dimitrios Antos, Avi Pfeffer

R-46: Game Theoretic Network Centrality: Exact Formulas and Efficient Algorithms

Karthik Aadithya, Balaraman Ravindran

R-47: Valuing Search and Communication in Partially-Observable Coordination Problems

Simon Williams, Archie Chapman, Nick Jennings

R-48: Speeding Up Gradient Based Algorithms for Sequential Games

Andrew Gilpin, Tuomas Sandholm

R-49: Cooperative Equilibrium

Joseph Halpern, Nan Rong

R-50: Robust Bayesian Methods for Stackelberg Security Games

Christopher Kiekintveld, Janusz Marecki, Milind Tambe

R-51: Local Search Techniques for Computing Equilibria in Two-Player General-Sum Strategic-Form Games

Sofia Ceppi, Nicola Gatti, Giorgio Patrini, Marco Rocco

R-52: Combinatorial Auctions with Externalities

Piotr Krysta, Tomasz Michalak, Tuomas Sandholm, Michael Wooldridge

R-53: A Grey Box Approach to Automated Mechanism Design

Jinzhong Niu, Kai Cai, Simon Parsons

R-54: False-Name-Proofness with Bid Withdrawal

Mingyu Guo, Vincent Conitzer

R-55: Efficient Mechanisms with Small Subsidies

Ruggiero Cavallo

R-56: Incentive Analysis of Approximative Efficient Allocation Algorithms

Yevgeniy Vorobeychik, Yagil Engel

R-57: An Investigation of Representations of Combinatorial Auctions

David Locker, Kate Larson

R-58: Parameterizing the Winner Determination Problem for Combinatorial Auctions

David Locker, Kate Larson

R-59: Flexibly Priced Options: A New Mechanism for Sequential Auction Markets with Complementary Goods

Valentin Robu, Ioannis Vesiktas, Enrico Gerding, Nick Jennings

R-60: Time Constraints in Multi-Unit Combinatorial Auctions

Andreas Witzel, Ulle Endriss

R-61: An Algorithmic Game Theory Framework for Bilateral Bargaining with Uncertainty

Sofia Ceppi, Nicola Gatti

“BLUE” Session

Thursday 13 May, 16.00 – 18.00

B-1: Agent Based Analysis of Asset Pricing under Ambiguous Information

Ben-Alexander Cassell, Michael Wellman

B-2: Self Organisation in an Agent Network via Learning

Dayong Fe, Minjie Zhang, Danny Sutanto

B-3: A Coherence-Driven Action Selection in Dynamic Environments

Sindhu Joseph, Carles Sierra, Marco Schorlemmer

B-4: Image Based Exploration for Indoor Environments using Local Features

Aravindan Krishnan, Madhava Krishna, Supreeth Achar

B-5: Multi-Robot Area Coverage with Limited Visibility

Pooyan Fazli, Alireza Davoodi, Pasquier Philippe, Alan Mackworth

B-6: Multiple UAV Coalition Formation Strategies

Joel George, Jose Pinto, P.B. Sujit, Joao Sousa

B-7: Improving Multi-Robot Teleoperation by Inferring Operator Distraction

Bennie Lewis, Bulent Tastan, Gita Sukthankar

B-8: Coordination Through Institutionale Roles in Robot Collectives

José Nunos Pereira, Anders Christensen, Porfírio Silva, Pedro Lima

B-9: Mutual State Capability-Based Role Assignment Model

Somchaya Liemetcharat, Manuela Veloso

- B-10:** Coordinated Navigation for Multi-Robot Systems with Additional Constraints
Bernd Brüggermann, Dirk Schulz
- B-11:** A Reward Function Generation Method Using Genetic Algorithms: A Robot Soccer Case Study
Çetin Meriçli, Tekin Meriçli, H. Levent Akin
- B-12:** Multi Robotic Exploration with Communication Requirements to a Fixed Base Station
Piyooosh Mukhiya, Rahul Sawhney, Madhava Krishna
- B-13:** Robots Autonomously Self-Assemble into Dedicated Morphologies to Solve Different Tasks
Rehan O’Grady, Anders Christensen, Carlo Pinciroli, Marco Dorigo
- B-14:** ESP: Pursuit Evasion on Series-Parallel Graphs
Kenny Daniel, Richard Borie, Sven Koenig, Craig Tovey
- B-15:** On-Line Robot Execution Monitoring using Probabilistic Action Duration
Vittorio Ziparo, Luca Iocchi, Matteo Leonetti, Daniele Nardi
- B-16:** Dynamic Generation and Execution of Human Aware Navigation Plans
Thibault Kruse, Alexandra Kirsch, E. Akin Sisbot, Rachid Alami
- B-17:** Toward an Interleaved Model of Actions and Worlds in Social Simulation
Jeff Orkin, Deb Roy
- B-18:** Wishful Thinking in Effective Decision Making
Jonathan Ito, David Pynadath, Liz Sonenberg, Stacy Marsella
- B-19:** Dynamic Plot Generation by Continual Multiagent Planning
Michael Brenner
- B-20:** Directing Value-driven Artificial Characters
Rossana Damiano, Vincenzo Lombardo
- B-21:** Emotional Eye Movement Markup Language for Virtual Agents
Zheng Li, Xia Mao
- B-22:** Multimodal Interaction with a Virtual Character in Interactive Storytelling
Nikolaus Bee, Johannes Wagner, Elisabeth Andre, Fred Charles, David Pizzi, Marc Cavazza
- B-23:** Knowledge in Lineland
Olivier Gasquet, François Schwartzenuber
- B-24:** Deceptive Agents and Languages
Mark Dras, Debbie Richards, Meredith Taylor, Mary Gardiner
- B-25:** A Simulation Approach to Design Contracts that Govern Emergent Multi-Agent Systems
Maira Gatti, Simon Miles, Nir Oren, Michael Luck, Carlos Lucena
- B-26:** Reversal of Influence: Decrease of Innovator’s Influence under Information Diversification
Yukihisa Fujita, Yuichi Washida, Fujio Toriumi, Kazuhiro Ueda, Kenichiro Ishii
- B-27:** An Agent-based Simulation of Lock-in Dynamics in a duopoly

Michael Garlick, Maria Chli

B-28: Everything can be Agent!

Yoann Kubera, Philippe Mathieu, Sébastien Picault

B-29: Generation and Analysis of Multiple Futures with Swarming Agents

H. Van Dyke Parunak

B-30: Validation of Agent-based Crowd Egress Simulation

Bikramjit Banerjee, Landon Kraemer

B-31: Agent-Encapsulated Bayesian Networks and the Rumor Problem

Scott Langevin, Marco Valtorta, Mark Bloemeke

B-32: Symbolic Model Checking for Agent Interactions

Mohamed El-Menshawy, Wei Wan, Jamal Benthahar, Rachida Dssouli

B-33: An Agent Communication Protocol for Resolving Conflicts

Jamal Benthahar

B-34: Towards Model Checking & Simulation of a Multi-Tier Negotiation Protocol for Service Chains

Paul Karaenke, Stefan Kirn

B-35: Distributed Semantic Search for the Web: A Multiagent Approach

Murat Sensoy

B-36: A Social Network Defence against Whitewashing

Adrian Perrau de Pinninck, Marco Schorlemmer, Carles Sierra, Stephen Craneheld

B-37: Towards a new Cognitive Modeling Approach for Multi-Agent based Simulation of Stock Market Dynamics

Zahra Kodia, Lamjed Ben Said, Khaled Ghedira

B-38: Argumentation vs. Aggregation of Trust Evidence

Pierpaolo Dondio, Stephen Barrett

B-39: Using Machine Learning to Augment Collaborative Filtering of Community Discussions

Michael Brennan, Stacey Wrazien, Rachel Greenstadt

B-40: Inductively Generated Trust Alignments Based on Shared Interactions

Andrew Koster, Jordi Sabater-Mir, Marco Schorlemmer

B-41: Comprehensive Trust Management

Sandip Sen, Kuheli Chakraborty

B-42: Quality of Trust for Social Trust Path Selection in Complex Social Networks

Guanfeng Liu, Yan Wang, Mehmet Orgun

B-43: A Clustering Approach to Filtering Unfair Testimonies for Reputation Systems

Siyuan Liu, Chunyan Miao, Yin-Leng Theng, Alex Kot

B-44: Optimal Seeding in Knockout Tournaments

Thuc Vu, Yoav Shoham

- B-45:** Virtual World Grammar
Tomas Trescak, Marc Esteva, Immaculata Rodriguez
- B-46:** Online Model Learning in Adversarial Markov Decision Processes
Doran Chakraborty, Peter Stone
- B-47:** Action Discovery for Reinforcement Learning
Bijkranjit Banerjee, Landon Kraemer
- B-48:** Bayesian Role Discovery for Multi-Agent Reinforcement Learning
Aaron Wilson, Alan Fern, Prasad Tadepalli
- B-49:** Model-based Direct Policy Search
Jan Hendrik Metzen, Frank Kirchner
- B-50:** Co-evolution of Agent Strategies in N-Player Dilemmas
Raymond Chiong, Michael Kirley
- B-51:** Analyzing the impact of human bias on human-agent teams in resource allocation domains
Praveen Paruchuri, Pradeep Varakantham, Katia Sycara, Paul Scerri
- B-52:** Syncretic Argumentation by Lattice Homomorphism and Fusion
Taichi Hasegawa, Hajime Sawamura
- B-53:** Learning Policies through Argumentation-Derived Evidence
Chukwuemeka Emele, Timothy Norman, Frank Guerin, Simon Parsons
- B-54:** Flexible Agreement Mechanism for Dynamic Meaning Negotiation
Paul Doran, Valentina Tomma, Terry Payne, Ignazio Palmisano
- B-55:** Genetic Aided Multi-Issue Bilateral Bargaining for Complex Utility Functions
Víctor Sánchez-Anguiz, Soledad Valero, Vicente Julian, Vicent Botti, Ana García Fornes
- B-56:** Effect of Probabilistic Task Allocation Based on Statistical Analysis of Bid Values
Toshiharu Sugawara, Satoshi Kurihara, Toshio Hirotsu, Kensuke Fukuda
- B-57:** Effective Negotiation with Partial Preference Information
Reyhan Aydogan, Pinar Yokum
- B-58:** Searching for Pure Strategy Equilibria in Bilateral Bargaining with One-sided Uncertainty
Bo An, Nicola Gatti, Victor Lesser
- B-59:** On Monotonic Mixed Tactics and Strategies for Bilateral Multi-Issue Negotiations
Jan Richter, Matthias Klusch, Ryszard Kowalczyk
- B-60:** A Multi-issue Negotiation Framework for Non-monotonic Preference Spaces
Miguel A. Lopez-Carmona, Ivan Mars-Maestre, Juan R. Velasco, Enrique de la Hoz