

ECAI 2014

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# ECAI 2014

21st European Conference on Artificial Intelligence  
18–22 August 2014, Prague, Czech Republic

Including  
Prestigious Applications of Intelligent Systems (PAIS 2014)

## Proceedings

Edited by

**Torsten Schaub**

*University of Potsdam, Germany*

**Gerhard Friedrich**

*University of Klagenfurt, Austria*

and

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# Introduction

This volume contains the proceedings of the Twenty-first European Conference on Artificial Intelligence (ECAI'14), held from August 18 to 22, 2014 in Prague, Czech Republic. Since 1974, the biennial European Conference on Artificial Intelligence, organized by the European Coordinating Committee for Artificial Intelligence (ECCAI), has been the premier venue for presenting AI research in Europe. ECAI is the place for researchers and practitioners of Artificial Intelligence (AI) to gather and to discuss the latest trends and challenges in all subfields of AI as well as to demonstrate innovative applications and uses of advanced AI technology.

As in past editions, ECAI'14 was accompanied by the Conference on Prestigious Applications of Intelligent Systems (PAIS 2014), from which the papers are also included in this volume, and the Starting AI Researcher Symposium (STAIRS), the papers of which are published in a separate volume. Moreover, the program of ECAI'14 includes four invited plenary talks, several invited talks in the "Frontiers of Artificial Intelligence" track, as well as an extensive workshop and tutorial program.

In total, 611 papers were submitted to ECAI'14, viz. 562 long and 49 short papers. Of these, 158 (28%) and 20 (41%) were accepted, respectively, as well as 89 long papers, which were accepted as short papers. Similar to previous ECAI conferences, the largest areas of submission were 'Knowledge Representation, Reasoning, and Logic', followed by 'Agent-based and Multi-agent Systems' and 'Machine Learning and Data Mining'.

I was lucky to be part of a wonderful and highly dedicated team: I would like to thank Marina De Vos and Karl Tuyls for putting in place an extensive workshop program, Agostino Dovier and Paolo Torroni for attracting exciting tutorials, João Leite and Ulle Endriss for their devotion to STAIRS'14, and last but not least Gerhard Friedrich and Barry O'Sullivan for chairing PAIS'14 as well as organizing the system demonstration track. I would also like to thank the local organizers Vladimír Mařík, Olga Štěpánková, and Filip Železný for our constructive collaboration. A special thanks goes to Zuzana Šeps for having always been there when needed! I also benefited a lot from the experience, material, and advice obtained from my two predecessors, Luc De Raedt and Michael Wooldridge. Similarly, I would like to thank the members of the ECCAI board for their advice and guidance. I am indebted to Thomas Preuss for his constant support with ConfMaster. Of course, it goes without saying that my life would have been truly miserable without the great support of my group: Holger Jost, Philip Obermeier, Javier Romero, Orkunt Sabuncu, Roland Kaminski, Benjamin Andres, and Max Ostrowski. And finally, thanks to all PC and SPC members, reviewers, sponsors, and all authors who submitted to ECAI'14.

See you all in Prague!

Torsten Schaub, June 2014

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# Contents

Introduction	v
<i>Torsten Schaub</i>	
Conference Organization	vi
<b>ECAI Long Papers</b>	
Breaking Conditional Symmetry in Automated Constraint Modelling with CONJURE	3
<i>Ozgur Akgun, Ian P. Gent, Christopher Jefferson, Ian Miguel and Peter Nightingale</i>	
Decidable Model-Checking for a Resource Logic with Production of Resources	9
<i>Natasha Alechina, Brian Logan, Hoang Nga Nguyen and Franco Raimondi</i>	
Data Interlinking Through Robust Linkkey Extraction	15
<i>Manuel Atencia, Jérôme David and Jérôme Euzenat</i>	
Knowledge and Gossip	21
<i>Maduka Attamah, Hans van Ditmarsch, Davide Grossi and Wiebe van der Hoek</i>	
The Significance of Bidding, Accepting and Opponent Modeling in Automated Negotiation	27
<i>Tim Baarslag, Alexander Dirkzwager, Koen V. Hindriks and Catholijn M. Jonker</i>	
Parameterising the Complexity of Planning by the Number of Paths in the Domain-Transition Graphs	33
<i>Christer Bäckström</i>	
Extending Acyclicity Notions for Existential Rules	39
<i>Jean-François Baget, Fabien Garreau, Marie-Laure Mugnier and Swan Rocher</i>	
Communicating with Unknown Teammates	45
<i>Samuel Barrett, Noa Agmon, Noam Hazon, Sarit Kraus and Peter Stone</i>	
Symmetry-Driven Decision Diagrams for Knowledge Compilation	51
<i>Anicet Bart, Frédéric Koriche, Jean-Marie Lagniez and Pierre Marquis</i>	
Effective and Robust Natural Language Understanding for Human-Robot Interaction	57
<i>Emanuele Bastianelli, Giuseppe Castellucci, Danilo Croce, Roberto Basili and Daniele Nardi</i>	
Context-Free and Context-Sensitive Kernels: Update and Deletion Equivalence in Abstract Argumentation	63
<i>Ringo Baumann</i>	
Compact Argumentation Frameworks	69
<i>Ringo Baumann, Wolfgang Dvořák, Thomas Linsbichler, Hannes Strass and Stefan Woltran</i>	
Scoring Rules for the Allocation of Indivisible Goods	75
<i>Dorothea Baumeister, Sylvain Bouveret, Jérôme Lang, Nhan-Tam Nguyen, Trung Thanh Nguyen and Jörg Rothe</i>	
Model Checking Auctions as Artifact Systems: Decidability via Finite Abstraction	81
<i>Francesco Belardinelli</i>	
Incremental Elicitation of Choquet Capacities for Multicriteria Decision Making	87
<i>Nawal Benabbou, Patrice Perny and Paolo Viappiani</i>	
Automating Gödel’s Ontological Proof of God’s Existence with Higher-Order Automated Theorem Provers	93
<i>Christoph Benz Müller and Bruno Woltzenlogel Paleo</i>	

Boosting Constraint Acquisition via Generalization Queries <i>Christian Bessiere, Remi Coletta, Abderrazak Daoudi, Nadjib Lazaar, Younes Mechqrane and El Houssine Bouyakhf</i>	99
Influencing Social Networks: An Optimal Control Study <i>Daan Bloembergen, Bijan Ranjbar-Sahraei, Haitham Bou Ammar, Karl Tuyls and Gerhard Weiss</i>	105
Inference in the FO(C) Modelling Language <i>Bart Bogaerts, Joost Vennekens, Marc Denecker and Jan Van den Bussche</i>	111
Abduction and Dialogical Proof in Argumentation and Logic Programming <i>Richard Booth, Dov Gabbay, Souhila Kaci, Tjitze Rienstra and Leendert van der Torre</i>	117
Credibility-Limited Improvement Operators <i>Richard Booth, Eduardo Fermé, Sébastien Konieczny and Ramón Pino Pérez</i>	123
‘Being a Manifold’ as the Topological Primitive of Mereotopology <i>Stefano Borgo</i>	129
Analogical Classification: A New Way to Deal with Examples <i>Myriam Bounhas, Henri Prade and Gilles Richard</i>	135
Manipulating Picking Sequences <i>Sylvain Bouveret and Jérôme Lang</i>	141
On The Properties of Belief Tracking for Online Contingent Planning Using Regression <i>Ronen Brafman and Guy Shani</i>	147
GRAPPA: A Semantical Framework for Graph-Based Argument Processing <i>Gerhard Brewka and Stefan Woltran</i>	153
Multi-Context Systems for Reactive Reasoning in Dynamic Environments <i>Gerhard Brewka, Stefan Ellmauthaler and Jörg Pührer</i>	159
Abstract Disjunctive Answer Set Solvers <i>Remi Brochenin, Yuliya Lierler and Marco Maratea</i>	165
Planning and Execution of Robot Tasks Based on a Platform-Independent Model of Robot Capabilities <i>Jennifer Buehler and Maurice Pagnucco</i>	171
ATL with Truly Perfect Recall: Expressivity and Validities <i>Nils Bulling, Wojciech Jamroga and Matei Popovici</i>	177
Eliciting a Suitable Voting Rule via Examples <i>Olivier Cailloux and Ulle Endriss</i>	183
A GPU Implementation of Large Neighborhood Search for Solving Constraint Optimization Problems <i>F. Campeotto, A. Dovier, F. Fioretto and E. Pontelli</i>	189
A Systematic Solution to the (De-)Composition Problem in General Game Playing <i>Timothy Cereshe, David Rajaratnam, Abdallah Saffidine and Michael Thielscher</i>	195
Practical Performance of Refinements of Nash Equilibria in Extensive-Form Zero-Sum Games <i>Jiří Čermák, Branislav Bošanský and Viliam Lisý</i>	201
Formal Arguments, Preferences, and Natural Language Interfaces to Humans: An Empirical Evaluation <i>Federico Cerutti, Nava Tintarev and Nir Oren</i>	207
Lattice-Based Biclustering Using Partition Pattern Structures <i>Victor Codocedo and Amedeo Napoli</i>	213

Reducing Global Consistency to Local Consistency in Ontology-Based Data Access <i>Marco Console and Maurizio Lenzerini</i>	219
On the Efficient Implementation of Social Abstract Argumentation <i>Marco Correia, Jorge Cruz and João Leite</i>	225
Belief Merging Within Fragments of Propositional Logic <i>Nadia Creignou, Odile Papini, Stefan Rümmele and Stefan Woltran</i>	231
A Single-Agent Approach to Multiagent Planning <i>Matthew Crosby, Anders Jonsson and Michael Rovatsos</i>	237
Characterising Semantic Relatedness Using Interpretable Directions in Conceptual Spaces <i>Joaquín Derrac and Steven Schockaert</i>	243
Concept Dissimilarity Based on Tree Edit Distances and Morphological Dilations <i>Felix Distel, Jamal Atif and Isabelle Bloch</i>	249
Nonparametric Bayesian Multi-Task Large-Margin Classification <i>Changying Du, Jia He, Fuzhen Zhuang, Yuan Qi and Qing He</i>	255
Reasoning About Uncertainty and Explicit Ignorance in Generalized Possibilistic Logic <i>Didier Dubois, Henri Prade and Steven Schockaert</i>	261
An Axiomatic Analysis of Structured Argumentation for Prioritized Default Reasoning <i>Phan Minh Dung</i>	267
A Profit-Aware Negotiation Mechanism for On-Demand Transport Services <i>Malcolm Egan and Michal Jakob</i>	273
Mining Heterogeneous Multidimensional Sequential Patterns <i>Elias Egho, Chedy Raïssi, Nicolas Jay and Amedeo Napoli</i>	279
Towards Practical Deletion Repair of Inconsistent DL-Programs <i>Thomas Eiter, Michael Fink and Daria Stepanova</i>	285
Collective Rationality in Graph Aggregation <i>Ulle Endriss and Umberto Grandi</i>	291
Self-Decomposable Global Constraints <i>Jean-Guillaume Fages, Xavier Lorca and Thierry Petit</i>	297
Solving Maximum Weight Clique Using Maximum Satisfiability Reasoning <i>Zhiwen Fang, Chu-Min Li, Kan Qiao, Xu Feng and Ke Xu</i>	303
Multilateral Bargaining for Resource Division <i>Shaheen Fatima and Michael Wooldridge</i>	309
Bargaining for Coalition Structure Formation <i>Shaheen Fatima, Tomasz Michalak and Michael Wooldridge</i>	315
Monte-Carlo Tree Search: To MC or to DP? <i>Zohar Feldman and Carmel Domshlak</i>	321
Improving Pattern Discovery Relevancy by Deriving Constraints from Expert Models <i>Frédéric Flouvat, Jérémy Sanhes, Claude Pasquier, Nazha Selmaoui-Folcher and Jean-François Boulicaut</i>	327
Argumentation Accelerated Reinforcement Learning for Cooperative Multi-Agent Systems <i>Yang Gao and Francesca Toni</i>	333
Detecting the Reputation Polarity of Microblog Posts <i>Cristina Gârbacea, Manos Tsagkias and Maarten de Rijke</i>	339

Lower and Upper Approximations for Depleting Modules of Description Logic Ontologies <i>William Gatens, Boris Konev and Frank Wolter</i>	345
Answer Set Programming as SAT Modulo Acyclicity <i>Martin Gebser, Tomi Janhunen and Jussi Rintanen</i>	351
Past, Present, and Future: An Optimal Online Algorithm for Single-Player GDL-II Games <i>Florian Geißer, Thomas Keller and Robert Mattmüller</i>	357
Nested Dichotomies with Probability Sets for Multi-Class Classification <i>Gen Yang, Sébastien Destercke and Marie-Hélène Masson</i>	363
LTL Verification of Online Executions with Sensing in Bounded Situation Calculus <i>Giuseppe De Giacomo, Yves Lespérance, Fabio Patrizi and Stavros Vassos</i>	369
Evolving Multi-Context Systems <i>Ricardo Gonçalves, Matthias Knorr and João Leite</i>	375
Embedding Heterogeneous Data by Preserving Multiple Kernels <i>Mehmet Gönen</i>	381
Bayesian Multiview Dimensionality Reduction for Learning Predictive Subspaces <i>Mehmet Gönen, Güleşan Bozkurt Gönen and Fikret Gürgen</i>	387
Near Fairness in Matroids <i>Laurent Gourvès, Jérôme Monnot and Lydia Tlilane</i>	393
Strategic Argumentation Is NP-Complete <i>G. Governatori, F. Olivieri, S. Scannapieco, A. Rotolo and M. Cristani</i>	399
Diagnosis of Hybrid Systems with SMT: Opportunities and Challenges <i>Alban Grastien</i>	405
Controlling Two-Stage Voting Rules <i>Jiong Guo and Yash Raj Shrestha</i>	411
Human-Computer Negotiation in Three-Player Market Settings <i>Galit Haim, Ya'akov (Kobi) Gal, Sarit Kraus and Bo An</i>	417
Measuring Diversity of Preferences in a Group <i>Vahid Hashemi and Ulle Endriss</i>	423
Spatio-Temporal Stream Reasoning with Incomplete Spatial Information <i>Fredrik Heintz and Daniel de Leng</i>	429
On the Revision of Planning Tasks <i>Andreas Herzig, Viviane Menezes, Leliane Nunes de Barros and Renata Wassermann</i>	435
“Distance”? Who Cares? Tailoring Merge-and-Shrink Heuristics to Detect Unsolvability <i>Jörg Hoffmann, Peter Kissmann and Álvaro Torralba</i>	441
Language Classification of Hierarchical Planning Problems <i>Daniel Höller, Gregor Behnke, Pascal Bercher and Susanne Biundo</i>	447
Progression in Maximum Satisfiability <i>A. Ignatiev, A. Morgado, V. Manquinho, I. Lynce and J. Marques-Silva</i>	453
A Practical, Integer-Linear Programming Model for the Delete-Relaxation in Cost-Optimal Planning <i>Tatsuya Imai and Alex Fukunaga</i>	459
Combining Restarts, Nogoods and Decompositions for Solving CSPs <i>Philippe Jégou and Cyril Terrioux</i>	465

Conflict Resolution in Partially Ordered OWL DL Ontologies	471
<i>Qiu Ji, Zhiqiang Gao and Zhisheng Huang</i>	
GOSU: Computing GOal SUPPORT with Commitments in Multiagent Systems	477
<i>Özgür Kafalı, Akın Günay and Pınar Yolum</i>	
Learning Pruning Rules for Heuristic Search Planning	483
<i>Michal Krajčanský, Jörg Hoffmann, Olivier Buffet and Alan Fern</i>	
Knowledge-Based Bias Correction – A Case Study in Veterinary Decision Support	489
<i>Thomas E. Krak and Linda C. van der Gaag</i>	
Qualitative Spatial and Temporal Reasoning with AND/OR Linear Programming	495
<i>Arne Kreutzmann and Diedrich Wolter</i>	
How Hard Is It to Compute Majority-Preserving Judgment Aggregation Rules?	501
<i>Jérôme Lang and Marija Slavkovic</i>	
The Complexity of Reasoning with Relative Directions	507
<i>Jae Hee Lee</i>	
$LTL_f$ Satisfiability Checking	513
<i>Jianwen Li, Lijun Zhang, Geguang Pu, Moshe Y. Vardi and Jifeng He</i>	
Constrained Latent Dirichlet Allocation for Subgroup Discovery with Topic Rules	519
<i>Rui Li, Zahra Ahmadi and Stefan Kramer</i>	
Bias Reformulation for One-Shot Function Induction	525
<i>Dianhuan Lin, Eyal Dechter, Kevin Ellis, Joshua Tenenbaum and Stephen Muggleton</i>	
Uncorrelated Multilinear Nearest Feature Line Analysis	531
<i>Ye Liu and Liqing Zhang</i>	
Common Spatial-Spectral Boosting Pattern for Brain-Computer Interface	537
<i>Ye Liu, Hao Zhang, Qibin Zhao and Liqing Zhang</i>	
Decidability of Model Checking Multi-Agent Systems Against a Class of EHS Specifications	543
<i>Alessio R. Lomuscio and Jakub Michaliszyn</i>	
Trust-Based Belief Change	549
<i>Emiliano Lorini, Guifei Jiang and Laurent Perrussel</i>	
The Logical Difference for $\mathcal{ELH}'$ -Terminologies Using Hypergraphs	555
<i>Michel Ludwig and Dirk Walther</i>	
Probabilistic Preference Logic Networks	561
<i>Thomas Lukasiewicz, Maria Vanina Martinez and Gerardo I. Simari</i>	
An Efficient Bayesian Network Structure Learning Algorithm in the Presence of Deterministic Relations	567
<i>Ahmed Mabrouk, Christophe Gonzales, Karine Jabet-Chevalier and Eric Chojnacki</i>	
An Evolutionary Spatial Game-Based Approach for the Self-Regulation of Social Exchanges in MAS	573
<i>Luís F.K. Macedo, Graçaliz P. Dimuro, Marilton S. Aguiar and Helder Coelho</i>	
How Hard Is Control in Single-Crossing Elections?	579
<i>Krzysztof Magiera and Piotr Faliszewski</i>	
Comparing Defeasible Logics	585
<i>Michael J. Maher</i>	
Information-Based Incentivisation when Rewards Are Inadequate	591
<i>Samhar Mahmoud, Lina Barakat, Simon Miles, Adel Taweel, Brendan Delaney and Michael Luck</i>	

Privacy Preserving Landmark Detection <i>Shlomi Maliah, Guy Shani and Roni Stern</i>	597
Efficient Autarkies <i>J. Marques-Silva, A. Ignatiev, A. Morgado, V. Manquinho and I. Lynce</i>	603
Some Elements for a Prehistory of Artificial Intelligence in the Last Four Centuries <i>Pierre Marquis, Odile Papini and Henri Prade</i>	609
Random Forests of Very Fast Decision Trees on GPU for Mining Evolving Big Data Streams <i>Diego Marron, Albert Bifet and Gianmarco De Francisci Morales</i>	615
Imprecise Probabilistic Horn Clause Logic <i>Steffen Michels, Arjen Hommersom, Peter J.F. Lucas and Marina Velikova</i>	621
From Analogical Proportions in Lattices to Proportional Analogies in Formal Concepts <i>Laurent Miclet, Nelly Barbot and Henri Prade</i>	627
Landmarks in Oversubscription Planning <i>Vitaly Mirkis and Carmel Domshlak</i>	633
A Cluster-Based Approach to Improve Similarity-Based Retrieval for Process-Oriented Case-Based Reasoning <i>Gilbert Müller and Ralph Bergmann</i>	639
A Finite-Valued Solver for Disjunctive Fuzzy Answer Set Programs <i>Mushthofa Mushthofa, Steven Schockaert and Martine De Cock</i>	645
A Shapley Value-Based Approach to Determine Gatekeepers in Social Networks with Applications <i>Ramasuri Narayanam, Oskar Skibski, Hemank Lamba and Tomasz Michalak</i>	651
The Computational Impact of Partial Votes on Strategic Voting <i>Nina Narodytska and Toby Walsh</i>	657
How Much Trust Is Enough to Trust? A Market-Adaptive Trust Threshold Setting for e-Marketplaces <i>Zeinab Noorian, Mohsen Mohkami and Julita Vassileva</i>	663
Pattern-Based Explanation for Automated Decisions <i>Ingrid Nunes, Simon Miles, Michael Luck, Simone Barbosa and Carlos Lucena</i>	669
CV-Width: A New Complexity Parameter for CNFs <i>Umut Oztok and Adnan Darwiche</i>	675
Integrating BDI Agents into a MATSim Simulation <i>Lin Padgham, Kai Nagel, Dhirendra Singh and Qingyu Chen</i>	681
Schedule Generation Schemes for Job Shop Problems with Fuzziness <i>Juan José Palacios, Camino R. Vela, Inés González-Rodríguez and Jorge Puente</i>	687
The Persistence of Most Probable Explanations in Bayesian Networks <i>Arnoud Pastink and Linda C. van der Gaag</i>	693
DITO: A CSP-Based Diagnostic Engine <i>Yannick Pencolé</i>	699
Quality-Based Rewards for Monte-Carlo Tree Search Simulations <i>Tom Pepels, Mandy J.W. Tak, Marc Lanctot and Mark H.M. Winands</i>	705
Syntactic Possibilistic Goal Generation <i>Célia da Costa Pereira and Andrea G.B. Tettamanzi</i>	711
Multi-Objective Learning of Hybrid Classifiers <i>Rok Piltaver, Mitja Luštrek, Jernej Zupančič, Sašo Džeroski and Matjaž Gams</i>	717



A Resource-Sensitive Logic of Agency <i>Daniele Porello and Nicolas Troquard</i>	723
Consolidation of Probabilistic Knowledge Bases by Inconsistency Minimization <i>Nico Potyka and Matthias Thimm</i>	729
On Support Relations in Abstract Argumentation as Abstractions of Inferential Relations <i>Henry Prakken</i>	735
Symmetry Breaking for Exact Solutions in Adjustable Robust Optimisation <i>S.D. Prestwich, M. Laumanns and B. Kawas</i>	741
An Agent-Based Model of Procrastination <i>Ruurdje Procee, Bart A. Kamphorst, Arlette van Wissen and John-Jules Ch. Meyer</i>	747
An Argumentation System for Reasoning with LPm <i>Wenzhao Qiao and Nico Roos</i>	753
Provisional Propagation for Verifying Monotonicity of Bayesian Networks <i>Merel T. Rietbergen, Linda C. van der Gaag and Hans L. Bodlaender</i>	759
Optimal Planning in the Presence of Conditional Effects: Extending LM-Cut with Context-Splitting <i>Gabriele Röger, Florian Pommerening and Malte Helmert</i>	765
The Semantics of Behavior <i>Nico Roos</i>	771
Statistical Constraints <i>Roberto Rossi, Steven Prestwich and S. Armagan Tarim</i>	777
Proactive and Reactive Reconfiguration for the Robust Execution of Multi Modality Plans <i>Enrico Scala and Pietro Torasso</i>	783
Normalized Relevance Distance – A Stable Metric for Computing Semantic Relatedness over Reference Corpora <i>Christoph Schaefer, Daniel Hienert and Thomas Gottron</i>	789
Declarative Spatial Reasoning with Boolean Combinations of Axis-Aligned Rectangular Polytopes <i>Carl Schultz and Mehul Bhatt</i>	795
A Semantic Account of Iterated Belief Revision in the Situation Calculus <i>Christoph Schwering and Gerhard Lakemeyer</i>	801
Heterogeneous Facility Location Without Money on the Line <i>Paolo Serafino and Carmine Ventrè</i>	807
Sequential Diagnosis of High Cardinality Faults in Knowledge-Bases by Direct Diagnosis Generation <i>Kostyantyn Shchekotykhin, Gerhard Friedrich, Patrick Rodler and Philipp Fleiss</i>	813
Unleashing Dec-MDPs in Security Games: Enabling Effective Defender Teamwork <i>Eric Shieh, Albert Xin Jiang, Amulya Yadav, Pradeep Varakantham and Milind Tambe</i>	819
On Combinatorial Actions and CMABs with Linear Side Information <i>Alexander Shleyfman, Antonin Komenda and Carmel Domshlak</i>	825
Optimisation for the Ride-Sharing Problem: A Complexity-Based Approach <i>Gilles Simonin and Barry O’Sullivan</i>	831
OpenSim: A Framework for Integrating Agent-Based Models and Simulation Components <i>Dhirendra Singh and Lin Padgham</i>	837
Set-Theoretic Duality: A Fundamental Feature of Combinatorial Optimisation <i>John Slaney</i>	843

Graph Abstraction for Closed Pattern Mining in Attributed Networks <i>Henry Soldano and Guillaume Santini</i>	849
Hybrid Query Answering Over OWL Ontologies <i>Giorgos Stoilos and Giorgos Stamou</i>	855
Verifying the Precision of Diagnostic Algorithms <i>Xingyu Su and Alban Grastien</i>	861
A Centrality Measure for Networks with Community Structure Based on a Generalization of the Owen Value <i>Piotr L. Szczepański, Tomasz P. Michalak and Michael Wooldridge</i>	867
Knowledge-Based Specification of Robot Motions <i>Moritz Tenorth, Georg Bartels and Michael Beetz</i>	873
Quantifying the Completeness of Goals in BDI Agent Systems <i>John Thangarajah, James Harland, David N. Morley and Neil Yorke-Smith</i>	879
Modelling the Dynamics of Emotional Awareness <i>Dilhan J. Thilakarathne and Jan Treur</i>	885
Coherence and Compatibility of Markov Logic Networks <i>Matthias Thimm</i>	891
Mixing Materialization and Query Rewriting for Existential Rules <i>Michaël Thomazo and Sebastian Rudolph</i>	897
Computing Skypattern Cubes <i>Willy Ugarte, Patrice Boizumault, Samir Loudni and Bruno Crémilleux</i>	903
The PeerRank Method for Peer Assessment <i>Toby Walsh</i>	909
Qualitative Simulation with Answer Set Programming <i>Timothy Wiley, Claude Sammut and Ivan Bratko</i>	915
Preference Inference Based on Lexicographic Models <i>Nic Wilson</i>	921
Learning Domain-Specific Sentiment Lexicon with Supervised Sentiment-Aware LDA <i>Min Yang, Dingju Zhu, Rashed Mustafa and Kam-Pui Chow</i>	927
Novel Architecture Of A Digital Neuron for FFNN Employing Special Multiplication <i>Roman Záluský, Daniela Ďuračková, Viera Stopjaková, Lukáš Nagy and Vladimír Sedlák</i>	933
Verifying CTL* Properties of GOLOG Programs over Local-Effect Actions <i>Benjamin Zarrieß and Jens Claßen</i>	939
False-Name-Proof Combinatorial Auction Design via Single-Minded Decomposition <i>Dengji Zhao, Siqi Luo, Taiki Todo and Makoto Yokoo</i>	945
<b>ECAI Short Papers</b>	
Checking the Correctness of Agent Designs Against Model-Based Requirements <i>Yoosef Abushark, Michael Winikoff, Tim Miller, James Harland and John Thangarajah</i>	953
How Good is the Shapley Value-Based Approach to the Influence Maximization Problem? <i>Kamil Adameczewski, Szymon Matejczyk and Tomasz P. Michalak</i>	955
DL-Lite and Interval Temporal Logics: A Marriage Proposal <i>A. Artale, D. Bresolin, A. Montanari, G. Sciavicco and V. Ryzhikov</i>	957

Social Computing in JaCaMo <i>Matteo Baldoni, Cristina Baroglio and Federico Capuzzimati</i>	959
Suboptimal Variants of the Conflict-Based Search Algorithm for the Multi-Agent Pathfinding Problem <i>Max Barer, Guni Sharon, Roni Stern and Ariel Felner</i>	961
Analysis of Interval-Based Possibilistic Networks <i>Salem Benferhat, Sylvain Lagrue and Karim Tabia</i>	963
Post-Processing a Classifier's Predictions: Strategies and Empirical Evaluation <i>Salem Benferhat, Karim Tabia, Mouaad Kezih and Mahmoud Taibi</i>	965
Assertional-Based Prioritized Removed Sets Revision of $DL-Lite_R$ Knowledge Bases <i>Salem Benferhat, Zied Bouraoui, Odile Papini and Eric Würbel</i>	967
A First Comparison of Abstract Argumentation Reasoning-Tools <i>Stefano Bistarelli, Fabio Rossi and Francesco Santini</i>	969
Sensitivity of Multi-Dimensional Bayesian Classifiers <i>Janneke H. Bolt and Silja Renooij</i>	971
A Privacy-Preserving Model for the Multi-Agent Propositional Planning Problem <i>Andrea Bonisoli, Alfonso E. Gerevini, Alessandro Saetti and Ivan Serina</i>	973
Mining Balanced Sequential Patterns in RTS Games <i>Guillaume Bosc, Mehdi Kaytoue, Chedy Raïssi, Jean-François Boulicaut and Philip Tan</i>	975
From Formal Requirements on Technical Systems to Complete Designs – A Holistic Approach <i>Björn Böttcher, Natalia Moriz and Oliver Niggemann</i>	977
Combining Reasoning on Semantic Web Metadata <i>Loris Bozzato and Luciano Serafini</i>	979
Using Ensemble Techniques and Multi-Objectivization to Solve Reinforcement Learning Problems <i>Tim Brys, Matthew E. Taylor and Ann Nowé</i>	981
Spatial Evolutionary Game-Theoretic Perspective on Agent-Based Complex Negotiations <i>Siqi Chen, Jianye Hao, Gerhard Weiss, Karl Tuyls and Ho-fung Leung</i>	983
Predicting Agents' Behavior by Measuring Their Social Preferences <i>Kan-Leung Cheng, Inon Zuckerman, Dana Nau and Jennifer Golbeck</i>	985
A Deductive Approach to the Identification and Description of Clusters in Linked Open Data <i>Simona Colucci, Silvia Giannini, Francesco M. Donini and Eugenio Di Sciascio</i>	987
Adaptive Active Learning as a Multi-Armed Bandit Problem <i>Wojciech M. Czarnecki and Igor T. Podolak</i>	989
Inconsistency Resolution and Global Conflicts <i>C.A.D. Deagustini, M.V. Martinez, M.A. Falappa and G.R. Simari</i>	991
Quality in Quantity – Relative Direction Constraints Using Sector Sets Around Oriented Points <i>André van Delden</i>	993
Actions with Durations and Failures in BDI Languages <i>Louise A. Dennis and Michael Fisher</i>	995
A Logic of Part and Whole for Buffered Geometries <i>Heshan Du and Natasha Alechina</i>	997
Learning Non-Cooperative Behaviour for Dialogue Agents <i>Ioannis Efstathiou and Oliver Lemon</i>	999

Propositional Merging and Judgment Aggregation: Two Compatible Approaches? <i>Patricia Everaere, Sébastien Konieczny and Pierre Marquis</i>	1001
Analyzing the Tradeoff Between Efficiency and Cost of Norm Enforcement in Stochastic Environments <i>Moser Silva Fagundes, Sascha Ossowski and Felipe Meneguzzi</i>	1003
On Computing Explanations in Abstract Argumentation <i>Xiuyi Fan and Francesca Toni</i>	1005
Planning with Ensembles of Classifiers <i>Alberto Garbajosa, Tomás de la Rosa and Raquel Fuentetaja</i>	1007
Social Network Data Analysis for Event Detection <i>Dario Garcia-Gasulla, Sergio Alvarez-Napagao, Arturo Tejeda-Gómez, Luis Oliva-Felipe, Ignasi Gómez-Sebastià, Javier Bejar and Javier Vázquez-Salceda</i>	1009
Conditioned Belief Propagation Revisited <i>Thomas Geier, Felix Richter and Susanne Biundo</i>	1011
Utility-Based HTN Planning <i>Ilche Georgievski and Alexander Lazovik</i>	1013
Using Multiple Contexts to Distinguish Standing from Sitting with a Single Accelerometer <i>Hristijan Gjoreski, Simon Kozina, Mitja Luštrek and Matjaž Gams</i>	1015
Enforcing Solutions in Constraint Networks <i>Éric Grégoire, Jean-Marie Lagniez and Bertrand Mazure</i>	1017
Negotiation to Execute Continuous Long-Term Tasks <i>Valeriia Haberland, Simon Miles and Michael Luck</i>	1019
Off-Policy Shaping Ensembles in Reinforcement Learning <i>Anna Harutyunyan, Tim Brys, Peter Vrancx and Ann Nowé</i>	1021
ADS2: Anytime Distributed Supervision of Distributed Systems that Face Unreliable or Costly Communication <i>Cédric Herpson, Amal El Fallah Seghrouchni and Vincent Corruble</i>	1023
An Algorithm for the Penalized Multiple Choice Knapsack Problem <i>Elizabeth M. Hilliard, Amy Greenwald and Victor Naroditskiy</i>	1025
Generation of Relevant Spreadsheet Repair Candidates <i>Birgit Hofer, Rui Abreu, Alexandre Perez and Franz Wotawa</i>	1027
Comparing Models for Spreadsheet Fault Localization <i>Birgit Hofer and Franz Wotawa</i>	1029
Video Event Recognition by Dempster-Shafer Theory <i>Xin Hong, Yan Huang, Wenjun Ma, Paul Miller, Weiru Liu and Huiyu Zhou</i>	1031
Probabilistic Argumentation with Incomplete Information <i>Anthony Hunter and Matthias Thimm</i>	1033
Multiobjective Prices of Stability and Anarchy for Multiobjective Games <i>Anisse Ismaili</i>	1035
Prime Implicates Based Inconsistency Characterization <i>Said Jabbour, Yue Ma, Badran Raddaoui and Lakhdar Sais</i>	1037
From Default and Autoepistemic Logics to Disjunctive Answer Set Programs via the Logic of GK <i>Jianmin Ji and Hannes Strass</i>	1039

Fuzzy Logic for Preferences Expressible by Convolutions <i>Krystian Jobczyk, Maroua Bouzid, Antoni Ligęza and Jerzy Karczmarczuk</i>	1041
Estimating Trust from Agents' Interactions via Commitments <i>Anup K. Kalia, Zhe Zhang and Munindar P. Singh</i>	1043
On the Usage of Behavior Models to Detect ATM Fraud <i>Timo Klerx, Maik Anderka and Hans Kleine Büning</i>	1045
On the Use of Target Sets for Move Selection in Multi-Agent Debates <i>Dionysios Kontarinis, Elise Bonzon, Nicolas Maudet and Pavlos Moraitis</i>	1047
Probabilistic Active Learning: A Short Proposition <i>Georg Kreml, Daniel Kottke and Myra Spiliopoulou</i>	1049
An Optimal Iterative Algorithm for Extracting MUCs in a Black-Box Constraint Network <i>Philippe Laborie</i>	1051
Heuristics to Increase Observability in Spectrum-Based Fault Localization <i>Claudio Landi, Arjan van Gemund and Marina Zanella</i>	1053
A Weakening of Independence in Judgment Aggregation: Agenda Separability <i>Jérôme Lang, Marija Slavkovic and Srdjan Vesic</i>	1055
A Decomposition Approach for Discovering Discriminative Motifs in a Sequence Database <i>David Lesaint, Deepak Mehta, Barry O'Sullivan and Vincent Vigneron</i>	1057
Width-Based Algorithms for Classical Planning: New Results <i>Nir Lipovetzky and Hector Geffner</i>	1059
An Intelligent Threat Prevention Framework with Heterogeneous Information <i>Wenjun Ma and Weiru Liu</i>	1061
Coordinated Team Learning and Difference Rewards for Distributed Intrusion Response <i>Kleanthis Malialis, Sam Devlin and Daniel Kudenko</i>	1063
Timeout-Sensitive Portfolio Approach to Enumerating Minimal Correction Subsets for Satisfiability Problems <i>Yuri Malitsky, Barry O'Sullivan, Alessandro Previti and Joao Marques-Silva</i>	1065
How Hard Is It to Control an Election by Breaking Ties? <i>Nicholas Mattei, Nina Narodytska and Toby Walsh</i>	1067
Modeling Gaze Mechanisms for Grounding in HRI <i>Gregor Mehlmann, Kathrin Janowski, Tobias Baur, Markus Häring, Elisabeth André and Patrick Gebhard</i>	1069
Faustian Dynamics in Sarkar's Social Cycle <i>Svetlana Obraztsova, Zinovi Rabinovich and Alexandra Madunts</i>	1071
Trustworthy Advice <i>Nardine Osman, Patricia Gutierrez and Carles Sierra</i>	1073
Momentum Online LDA for Large-scale Datasets <i>Jihong Ouyang, You Lu and Ximing Li</i>	1075
Imitative Leadsheet Generation with User Constraints <i>François Pachet and Pierre Roy</i>	1077
(Co)evolution Leads Towards ROMAs <i>Jan Paredis</i>	1079

A New Study of Two Divergence Metrics for Change Detection in Data Streams <i>Abdulhakim Qahtan, Suojin Wang, Raymond Carroll and Xiangliang Zhang</i>	1081
Finding Good Stochastic Factored Policies for Factored Markov Decision Processes <i>Julia Radoszycki, Nathalie Peyrard and Régis Sabbadin</i>	1083
An Approximate Counting for Big Textual Data Streams <i>Rudy Raymond, Teruo Koyanagi and Takayuki Osogami</i>	1085
Multi Agent Learning of Relational Action Models <i>Christophe Rodrigues, Henry Soldano, Gauvain Bourgne and Céline Rouveirol</i>	1087
Transductive Learning for Multi-Task Copula Processes <i>Markus Schneider and Fabio Ramos</i>	1089
Exploiting the Semantic Web for Systems Diagnosis <i>Anika Schumann, Freddy Lécué and Joern Ploennigs</i>	1091
STIT is Dangerously Undecidable <i>François Schwarzentruher and Caroline Semmling</i>	1093
Comparing Data Distribution Using Fading Histograms <i>Raquel Sebastião, João Gama and Teresa Mendonça</i>	1095
Bounded Intention Planning Revisited <i>Silvan Sievers, Martin Wehrle and Malte Helmert</i>	1097
Introducing Hierarchical Adversarial Search, a Scalable Search Procedure for Real-Time Strategy Game <i>Marius Stanescu, Nicolas A. Barriga and Michael Buro</i>	1099
Detection and Quantification of Hand Eczema by Visible Spectrum Skin Pattern Analysis <i>Christoph Suter, Alexander Navarini, Marc Pouly, Ruedi Arnold, Florian S. Gutzwiller, René Meier and Thomas Koller</i>	1101
Surrogate-Agent Modeling for Improved Training <i>Ales Tavcar, Bostjan Kaluza, Marcel Kvassay, Bernhard Schneider and Matjaz Gams</i>	1103
Simultaneous Tracking and Activity Recognition (STAR) Using Advanced Agent-Based Behavioral Simulations <i>Arsène Fansi T., Vincent Thomas, Olivier Buffet, Fabien Flacher and Alain Dutech</i>	1105
Rational Deployment of Multiple Heuristics in IDA* <i>David Tolpin, Oded Betzalel, Ariel Felner, Solomon Eyal Shimony</i>	1107
Probabilistic Two-Level Anomaly Detection for Correlated Systems <i>Bin Tong, Tetsuro Morimura, Einoshin Suzuki and Tsuyoshi Idé</i>	1109
Generating Multi-Agent Plans by Distributed Intersection of Finite State Machines <i>Jan Tožička, Jan Jakubův and Antonín Komenda</i>	1111
AGDISTIS – Agnostic Disambiguation of Named Entities Using Linked Open Data <i>Ricardo Usbeck, Axel-Cyrille Ngonga Ngomo, Michael Röder, Daniel Gerber, Sandro Athaide Coelho, Sören Auer and Andreas Both</i>	1113
Community Detection Based on a Naming Game <i>Thais Gobet Uzun and Carlos Henrique Costa Ribeiro</i>	1115
Argumentation Frameworks Features: An Initial Study <i>Mauro Vallati, Federico Cerutti and Massimiliano Giacomin</i>	1117
Unsupervised Semantic Clustering of Twitter Hashtags <i>Carlos Vicient and Antonio Moreno</i>	1119

Fast Instantiation of GGP Game Descriptions Using Prolog with Tabling <i>Jean-Noël Vittaut and Jean Méhat</i>	1121
Emotional Trends in Social Media – A State Space Approach <i>Sören Volkmann, Francisco Rangel, Oliver Niggemann and Paolo Rosso</i>	1123
Local Image Descriptor Inspired by Visual Cortex <i>Hui Wei and Zheng Dong</i>	1125
A Concise Horn Theory for RCC8 <i>Matthias Westphal and Julien Hué</i>	1127
Noised Diffusion Dynamics with Individual Biased Opinion <i>Fuhan Yan, Zhaofeng Li and Yichuan Jiang</i>	1129
Election Attacks with Few Candidates <i>Yongjie Yang</i>	1131
SP-MCTS-Based Intention Scheduling for BDI Agents <i>Yuan Yao, Brian Logan and John Thangarajah</i>	1133
Dynamic Taxi Pricing <i>Cheng Zeng and Nir Oren</i>	1135
Semantical Information Graph Model Toward Fast Information Valuation in Large Teamwork <i>Yulin Zhang, Yang Xu, Haixiao Hu and Xianggen Liu</i>	1137
From Disjunctive to Normal Logic Programs via Unfolding and Shifting <i>Yi Zhou</i>	1139
<b>PAIS Long Papers</b>	
NICTA Evacuation Planner: Actionable Evacuation Plans with Contraflows <i>Caroline Even, Victor Pillac and Pascal Van Hentenryck</i>	1143
Bicycle Route Planning with Route Choice Preferences <i>Jan Hrnčir, Qing Song, Pavol Zilecky, Marcel Nemet and Michal Jakob</i>	1149
No One Is Left “Unwatched”: Fairness in Observation of Crowds of Mobile Targets in Active Camera Surveillance <i>Prabhu Natarajan, Kian Hsiang Low and Mohan Kankanhalli</i>	1155
INTELLIREQ: Intelligent Techniques for Software Requirements Engineering <i>Gerald Ninaus, Alexander Felfernig, Martin Stettinger, Stefan Reiterer, Gerhard Leitner, Leopold Weninger and Walter Schanil</i>	1161
Efficient Policy Iteration for Periodic Markov Decision Processes <i>Takayuki Osogami and Rudy Raymond</i>	1167
Geometrical Feature Extraction for Cuneiforms <i>Ariella Richardson and Uzy Smilansky</i>	1173
Influence of Internal Values and Social Networks for Achieving Sustainable Organizations <i>N. Sánchez-Marroño, A. Alonso-Betanzos, O. Fontenla-Romero, C. Brinquis-Núñez, J.G. Polhill and T. Craig</i>	1179
Combining Engineering and Qualitative Models to Fault Diagnosis in Air Handling Units <i>Peter Struss, Raymond Sterling, Jesús Febres, Umbreen Sabir and Marcus M. Keane</i>	1185
Stop-Free Strategies for Traffic Networks: Decentralized On-Line Optimization <i>Mohamed Tlig, Olivier Buffet and Olivier Simonin</i>	1191

An Integrated Reconfigurable System for Maritime Situational Awareness <i>Marina Velikova, Peter Novák, Bas Huijbrechts, Jan Laarhuis, Jesper Hoeksma and Steffen Michels</i>	1197
<b>PAIS Short Papers</b>	
Stochastic Filtering Methods for Predicting Agent Performance in the Smart Grid <i>Charilaos Akasiadis and Georgios Chalkiadakis</i>	1205
Clustering Weather Situations with Respect to Prediction of Solar Irradiance by Multiple NWP Models <i>Pavel Krč, Kryštof Eben and Emil Pelikán</i>	1207
Modular Behavior Trees: Language for Fast AI in Open-World Video Games <i>Tomáš Plch, Matěj Marko, Petr Ondráček, Martin Černý, Jakub Gemrot and Cyril Brom</i>	1209
Extending Semantic Sensor Networks for Automatically Tackling Smart Building Problems <i>Joern Ploennigs, Anika Schumann and Freddy Lecue</i>	1211
ParkinsonCheck Smart Phone App <i>Aleksander Sadikov, Vida Groznik, Jure Žabkar, Martin Možina, Dejan Georgiev, Zvezdan Pirtošek and Ivan Bratko</i>	1213
Condition Monitoring with Incomplete Observations <i>Jonas Vlasselaer, Wannes Meert, Rocco Langone and Luc De Raedt</i>	1215
Real-Time Adaptive Problem Detection in Poultry <i>Steven P.D. Woudenberg, Linda C. van der Gaag, Ad Feelders and Armin R.W. Elbers</i>	1217
<b>System Demonstrations</b>	
The Piano Music Companion <i>Andreas Arzt, Sebastian Böck, Sebastian Flossmann, Harald Frostel, Martin Gasser, Cynthia C.S. Liem and Gerhard Widmer</i>	1221
VMAP: A Visual Schema Mapping Tool <i>Florin Chertes and Ingo Feinerer</i>	1223
Personalized Fully Multimodal Journey Planner <i>Michal Jakob, Jan Hrnčir, Luis Oliva, Francesco Ronzano, Pavol Zilecky and Jason Finnegan</i>	1225
Orwellian Eye: Video Recommendation with Microsoft Kinect <i>Tomáš Kliegr and Jaroslav Kuchař</i>	1227
Advanced Public Transport Network Analyser <i>Jan Nykl, Michal Jakob and Jan Hrnčir</i>	1229
Mobile Tourist Guide: Bridging the Gap Between Recommending, Planning and User-Centered Interaction <i>Richard Schaller and Martin Hacker</i>	1231
Author Index	1233