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Program

December 14th

Invited Talk

A Service-Oriented Infrastructure for Adaptive Systems based on Specification-Carrying Code Giovanna di Marzo Serugendo (Birkbeck College, University of London) [abstract]

Paper Session I

Session I.1: Logical models and learning

1. Implementation of Emotional Behaviours in Multi-agent System Using Fuzzy Logic and Temperamental Decision Mechanism Daria Barteneva (University of Porto), Nuno Lau (University of Aveiro), Luis Paulo Reis (University of Porto) [full paper]
2. Model Checking Abilities under Incomplete Information Is Indeed Delta2-complete Wojtek Jamroga (Clausthal University of Technology), Juergen Dix (Clausthal University of Technology) [full paper]
3. Learning Automata as a Basis for Multi Agent Reinforcement Learning Ann Nowé (Vrije Universiteit Brussel), Katja Verbeeck (Vrije Universiteit Brussel), Maarten Peeters (Vrije Universiteit Brussel) [abstract] [republished paper]
4. Reinforcement Learning based Control of Traffic Lights in Non-stationary Environments: A Case Study in a Microscopic Simulator Denise de Oliveira (UFRGS), Ana L. C. Bazzan (UFRGS), Bruno Castro da Silva (UFRGS), Eduardo W. Basso (UFRGS), Luis Nunes (ISCTE) [full paper]

Session I.2: Methodologies

1. Creating a comprehensive agent-oriented methodology Brian Henderson-Sellers (University of Technology, Sydney) [abstract] [republished paper]
2. Developing and evaluating a generic metamodel for MAS work products Ghassan Beydoun (University of New South Wales), Cesar Gonzalez-Perez (University of Technology, Sydney), Brian Henderson-Sellers (University of Technology, Sydney), Graham Low (University of New South Wales) [abstract] [republished paper]
3. Environment as a First-Class Abstraction in Multiagent Systems Danny Weyns (Katholieke Universiteit Leuven), Andrea Omicini (Università di Bologna, Cesena), James Odell (Intelligent Automation Inc., Ann Arbor, MI) [abstract] [republished paper]

Session I.3: Trust, reputation and economic models

1. Effective Use of Organisational Abstractions for Confidence Models Ramón Hermoso (University Rey Juan Carlos), Holger Billhardt (University Rey Juan Carlos), Roberto Centeno (University Rey Juan Carlos), Sascha Ossowski (University Rey Juan Carlos) [abstract] [republished paper]
2. Reputation in User Profiling for a Context-aware MultiAgent System Virginia Fuentes (Universidad Carlos III de Madrid), Nayat Sánchez Pi (Universidad Carlos III de Madrid), Javier Carbó (Universidad Carlos III de Madrid), Jose Manuel Molina (Universidad Carlos III de Madrid) [full paper]
3. Friends No More: Ostracism in Multi-Agent Systems Adrian Perreau de Pininck (IIIA - Artificial Intelligence Reserch Institute), Carles Sierra (IIIA - Artificial Intelligence Reserch Institute), Marco Schorlemmer (IIIA - Artificial Intelligence Reserch Institute) [full paper]
4. Bidding Languages and Winner Determination for Mixed Multi-unit Combinatorial Auctions Jesus Cerquides (University of Barcelona), Ulle Endriss (University of Amsterdam), Andrea Giovannucci (IIIA-CSIC), Juan Antonio Rodríguez-Aguilar (IIIA-CSIC) [abstract] [republished paper]
Paper Session II

Session II.1: Institutions and norms

1. Norm-Oriented Programming of Electronic Institutions: A Rule-based Approach Andrés García-Camino (IIIA-CSIC), Juan Antonio Rodríguez-Aguilar (IIIA-CSIC), Carles Sierra (IIIA-CSIC), Wamberto Vasconcelos (University of Aberdeen) [abstract] [republished paper]
2. Specifying and Enforcing Norms in Artificial Institutions Nicoletta Fornara (Università della Svizzera italiana), Marco Colombetti (Università della Svizzera italiana/Politecnico di Milano) [full paper]
3. Using a normative organisational model to specify and manage an institution for multi-agent systems Benjamin Gâteau (Henri Tudor Research Centre) [full paper]
4. A Metamodel for Verifying Institutions Francesco Viganò (Università della Svizzera italiana) [full paper]

Session II.2: Software engineering

1. Agent Capability: Automating the Design to Code Process Loris Penserini (ITC-IRST), Anna Perini (ITC-IRST), Angelo Susi (ITC-IRST), John Mylopoulos (University of Trento) [abstract] [republished paper]
2. A Customizable Multi-Agent System for Distributed Data Mining Giancarlo Fortino (University of Calabria), Giuseppe Di Fatta (University of Reading) [abstract] [republished paper]
3. DimaX: A Fault-Tolerant Multi-Agent Platform Nora Faci (University Reims Champagne Ardennes (CRESTIC-MODECO)), Zahia Guessoum (University Pierre and Marie Curie (LIP6) & University Reims Champagne Ardennes (CRESTIC-MODECO)), Olivier Marin (University Pierre and Marie Curie (LIP6)) [full paper]
4. An Agent Oriented Tool for Method Engineering Massimo Cossentino (Istituto di Calcolo delle Reti ad Alte Prestazioni, Consiglio Nazionale delle Ricerche; SET- Université de Technologie Belfort-Montbéliard), Luca Sabatucci (Dipartimento di Ingegneria Informatica, Università degli Studi di Palermo), Valeria Seidita (Dipartimento di Ingegneria Informatica, Università degli Studi di Palermo), Salvatore Gaglio (Dipartimento di Ingegneria Informatica, Università degli Studi di Palermo ; Istituto di Calcolo delle Reti ad Alte Prestazioni, Consiglio Nazionale delle Ricerche) [full paper]

Session II.3: E-commerce and auctions

1. Auction Mechanisms for Efficient Advertisement Selection on Public Displays Terry R. Payne (University of Southampton), Esther David (University of Southampton), Nicholas R. Jennings (University of Southampton), Matthew Sharifi (University of Southampton) [abstract] [republished paper]
2. Optimal Strategies for Bidding on Perfect Substitutes in Simultaneous Vickrey Auctions Enrico Gerding (University of Southampton), Rajdeep Dash (University of Southampton), David Yuen (University of Southampton), Nicholas Jennings (University of Southampton) [full paper]
3. Sellers Competing for Buyers in Online Markets: Reserve Prices, Shill Bids, and Auction Fees Enrico Gerding (University of Southampton), Alex Rogers (University of Southampton), Rajdeep Dash (University of Southampton), Nicholas Jennings (University of Southampton) [abstract] [republished paper]
4. Evolutionary Stability of Behavioural Types in the Continuous Double Auction Perukrishnen Vytelingum (University of Southampton), Dave Cliff (University of Southampton), Nicholas R. Jennings (University of Southampton) [abstract] [republished paper]

Paper Session III

Session III.1: Agent architectures

1. Agent-based Architecture in An Ambient Intelligence Context Nikolaos Spanoudakis (Singular Software SA), Pavlos Moraitis (ReNew Descartes University) [full paper]
2. Tuning Behaviours Using Attributes Embedded in an Agents Architecture Jose Cascalho (Universidade dos Acores), Helder Coelho (Faculdade de Ciencias da Universidade de Lisboa) [full paper]
3. Modeling Holonic Systems with an Organizational approach Sebastian Rodriguez (UTBM), Nicolas Gaud (UTBM), Vincent Hilaire (UTBM), Abdou Koukam (UTBM) [full paper]
Session III.2: Semantic Web and service oriented computing

1. **OWL-S for Describing Artifacts** Rossella Rubino (CIRSFID, Alma Mater Studiorum - Università di Bologna), Ambra Molesini (DEIS, Alma Mater Studiorum - Università di Bologna), Enrico Denti (DEIS, Alma Mater Studiorum - Università di Bologna) [full paper]

2. **Role-based Service Description and Discovery** Alberto Fernandez (University Rey Juan Carlos), Matteo Vasirani (University Rey Juan Carlos), Cesar Caceres (University Rey Juan Carlos), Sascha Ossowski (University Rey Juan Carlos) [abstract] [republished paper]

3. **Flexible Provisioning of Service Workflows** Sebastian Stein (University of Southampton), Nicholas Jennings (University of Southampton), Terry Payne (University of Southampton) [abstract] [republished paper]

Session III.3: Teamwork and coalitions

1. **The effect of heterogeneity on coalition formation in iterated request for proposal scenarios** Carlos Mérida-Campos (Technical University of Catalonia (UPC)), Steven Willmott (Technical University of Catalonia (UPC)) [full paper]

2. **Near-Optimal Anytime Coalition Structure Generation** Talal Rahwan (University of Southampton), Sarvapali Ramchurn (University of Southampton), Viet Dang (University of Southampton), Nicholas Jennings (University of Southampton) [abstract] [republished paper]

3. **Fighting Fire with Agents** Daniel Moura (Faculdade de Engenharia da Universidade do Porto), Eugénio Oliveira (Faculdade de Engenharia da Universidade do Porto) [full paper]
December 15th

Invited Talk

Going beyond BDI: Programming ‘BDI+’ Agents John-Jules Ch. Meyer (Utrecht University) [abstract]

Paper Session IV

Session IV.1: Argumentation, negotiation and planning

1. Agents arguing over Ontology Alignments Loredana Laera (University of Liverpool), Valentina Tamma (University of Liverpool), Jérôme Euzenat (INRIA Rhone-Alpes), Trevor Bench-Capon (University of Liverpool), Terry Payne (University of Southampton) [abstract] [republished paper]

2. Using Cooperative Agent Negotiation for Ontology Mapping Cassia Trojahn (Universidade de Évora), Marcia Moraes (Pontifícia Universidade Catolica do Rio Grande do Sul), Paulo Quaresma (Universidade de Évora), Renata Vieira (Universidade do Vale do Rio dos Sinos) [full paper]

3. An argumentation-based approach for dialog move selection Leila Amgoud (IRIT, Toulouse), Nabil Hameurlain (LIUPPA, Pau) [abstract] [republished paper]

4. A Planner for Implementing Semantic Service Agents based on Semantic Web Services Initiative Architecture Önder Gürçan (Ege University), Geylani Kardas (Ege University), Özgür Gümüş (Ege University), Erdem Eser Ekiç (Ege University), Öguz Dikenelli (Ege University) [full paper]

Session IV.2: Coordination and organisations

1. Coordinating tasks in agent organizations Virginia Dignum (Utrecht University), Frank Dignum (Utrecht University) [abstract] [republished paper]

2. Situated Semantic Alignment Manuel Atencia (IIIA-CSIC), Marco Schorlemmer (IIIA-CSIC) [full paper]

3. Exploiting the Environment for Coordinating Agent Intentions Tom Holvoet (K.U.Leuven), Paul Valckenaers (K.U.Leuven) [abstract] [republished paper]

4. The semantic core of multi-agent interactions: an operational model Sergio Saugar (University Rey Juan Carlos), Juan Manuel Serrano (University Rey Juan Carlos) [full paper]

Session IV.3: Agent-based simulation

1. Simulation as Formal and Generative Social Science: The Very Idea Nuno David (ISCTE), Jaime Sichman (University of São Paulo), Helder Coelho (University of Lisbon) [abstract] [republished paper]

2. Clustering Agent Optimization Results in Dynamic Scenarios André Restivo (Universidade do Porto), Luís P. Reis (Universidade do Porto) [full paper]

3. e*plore-ing the Simulation Design Space Luis Antunes (Universidade de Lisboa), Helder Coelho (Universidade de Lisboa), João Balsa (Universidade de Lisboa) [full paper]

4. Multi-agent coordination and anticipation model to design a road traffic simulation tool Arnaud Doniec (INRETS / LAMIH), Stéphane Espié (INRETS), René Mandiau (LAMIH), Sylvain Piechowiak (LAMIH) [full paper]

Paper Session V

Session V.1: Applications

1. Applications and environments for multi-agent systems Paul Valckenaers (Katholieke Universiteite Leuven), John Sauter (NewVectors LLC), Carles Sierra (IIIA-CSIC), Juan Antonio Rodriguez-Aguilar (IIIA-CSIC) [abstract] [republished paper]

2. A Utility-Based Sensing and Communication Model for a Glacial Sensor Network Partosh Padhy (University of Southampton), Rajdeep Dash (University of Southampton), Kirk Martinez (University of Southampton), Nicholas Jennings (University of Southampton) [abstract] [republished paper]

3. A multi-agent approach for the edge detection in image processings Jason Mahdjoub (CReSTIC), Zahia Guessoam (LJP6), Fabien Michel (CReSTIC), Michel Herbin (CReSTIC) [full paper]
Session V.2: Self-organisation and complex systems

1. **A Case of Self-Organising Environment for MAS: the Collective Sort Problem** Mirko Viroli (Alma Mater Studiorum - Università di Bologna), Matteo Casadei (Alma Mater Studiorum - Università di Bologna), Luca Gardelli (Alma Mater Studiorum - Università di Bologna) [full paper]

2. **Self-Organization Amongst Non-Altruistic Agents for Distribution of Goods: Comparing Bartering and Currency Based Exchange** David Cabanillas (Technical University of Catalonia), Steven Willmott (Technical University of Catalonia) [full paper]

3. **Self-regulating multi-agent system for multi-disciplinary optimisation process** Jean-Baptiste Welcomme (EADS CCR - IRIT), Marie-Pierre Gleizes (IRIT), Romaric Redon (EADS CCR) [full paper]

4. **Agent based modeling of social systems** Juan Pavón (Universidad Complutense Madrid), Candelaria Sanzores (Universidad Complutense Madrid), Jorge Gómez Sanz (Universidad Complutense Madrid) [abstract] [republished paper]

Session V.3: Protocols

1. **Towards Payment Systems for Mobile Agents** Christian Anhalt (University of Hohenheim), Stefan Kirn (University of Hohenheim) [full paper]

2. **DynCNET: A Protocol for Flexible Task Assignment Applied in an AGV Transportation System** Danny Weyns (Katholieke Universiteit Leuven), Nelis Boucke (Katholieke Universiteit Leuven), Tom Holvoet (Katholieke Universiteit Leuven), Kurt Schelfhout (Katholieke Universiteit Leuven) [full paper]

3. **Organized Anonymity in Agent Systems** Martijn Warnier (Vrije Universiteit Amsterdam), David de Groot (Vrije Universiteit Amsterdam), Frances Brazier (Vrije Universiteit Amsterdam) [full paper]