

AperTO - Archivio Istituzionale Open Access dell'Università di Torino

Proceedings of the 14th Workshop "From Objects to Agents", WOA 2013

This is the author's manuscript

Original Citation:

Availability:

This version is available <http://hdl.handle.net/2318/145395> since 2017-05-28T20:51:29Z

Publisher:

CEUR-WS Workshop Proceedings

Terms of use:

Open Access

Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.

(Article begins on next page)



Matteo Baldoni, Cristina Baroglio
Federico Bergenti, Alfredo Garro (eds.)

From Objects to Agents

*XIV Workshop, WOA 2013
Torino, Italy, December 2nd-3rd, 2013
Workshop Notes*

WOA 2013 Home Page:
<http://di.unito.it/woa2013>

Preface

Agent-based technologies, developed in the Artificial Intelligence area, have become more and more important especially in more traditional Computer Science areas, like Software Engineering, where the agent abstraction is considered a natural extension of the object abstraction. The importance of these techniques is also witnessed in the industrial sector by their use in the development of tools and applications.

Following the success of WOA 2000 in Parma, WOA 2001 in Modena, WOA 2002 in Milano, WOA 2003 in Villasimius, WOA 2004 in Torino, WOA 2005 in Camerino, WOA 2006 in Catania, WOA 2007 in Genova, WOA 2008 in Palermo, WOA 2009 in Parma, WOA 2010 in Rimini, WOA 2011 in Cosenza, WOA 2012 in Milano, WOA 2013 was hosted in Torino.

This year event, celebrating the fourteenth workshop edition, was co-located with the conference of the Italian Association for Artificial Intelligence. On this occasion we took stock of whether the agent technology can still be considered a scion of Artificial Intelligence and to which extent it can still be considered as connected to the object technology. We were honored to have Rafael Heitor Bordini as an invited speaker. His talk was intitled “Jason Comes of Age: 10 Years of Progress in Multi-Agent Oriented Programming”.

This volume contains *sixteen* papers, selected by the Programme Committee. Each paper received at least three reviews in order to supply the authors with helpful feedback that could stimulate the research as well as foster discussion.

We would like to thank all authors for their contributions, the members of the Steering Committee for the valuable suggestions and support, and the members of the Programme Committee for their excellent work during the reviewing phase.

November 25th, 2013

Matteo Baldoni
Cristina Baroglio
Federico Bergenti
Alfredo Garro

Program Committee

Matteo Baldoni	Dipartimento di Informatica, Univ. di Torino
Cristina Baroglio	Dipartimento di Informatica, Università di Torino
Federico Bergenti	Università degli Studi di Parma
Giacomo Cabri	Università di Modena e Reggio Emilia
Federico Chesani	University of Bologna
Rino Falcone	Istituto di Scienze e Tecnologie della Cognizione, CNR Roma
Nicoletta Fornara	Università della Svizzera Italiana, Lugano
Giancarlo Fortino	University of Calabria
Alfredo Garro	University of Calabria
Elisa Marengo	Dipartimento di Informatica, Università di Torino
Viviana Mascardi	DIBRIS (Department of Informatics, Bioengineering, Robotics and System Engineering), University of GENOVA, IT
Emanuela Merelli	University of Camerino
Andrea Omicini	Alma Mater Studiorum Università di Bologna
Paolo Petta	Austrian Research Institute for Artificial Intelligence
Agostino Poggi	University of Parma
Giovanni Rimassa	Whitestein Technologies AG
Andrea Santi	Università di Bologna
Corrado Santoro	
Paola Turci	University of Parma
Eloisa Vargiu	Barcelona Digital Technology Center
Mirko Viroli	Alma Mater Studiorum - Università di Bologna

Additional Reviewers

Giuliani, Alessandro

Keyword Index

actor model	91
Agent Communication Infrastructure	104
Agent Negotiation	54
Agent-based Data Mining	47
Agent-oriented Computing	60
Agents	41
agentbased modelling and simulation	30
Ambient Intelligence	47
BDI	66
biochemical coordination	16
biochemical kinetic laws	16
biochemical simulation	16
biopepa	16
Cloud Computing	60
Commitment and commitment-based protocol	104
computer vision	30
concurrent programming	91
crowd analysis	30
crowd synthesis	30
Design Methodologies	66
distributed systems	91
Event-driven programming	1
Expert system	41
Feature Expansion	78
Goals	66
Group Recommendation	73
groups	30
Health Information System (HIS)	24
Home and Building Automation	47
Internet of Things	60
Interoperability	24
JADE	85
Jade and Cartago	104
Knowledge Artifact	41

Market of Services	54
Middleware	60
mok	16
Multi-Agent System (MAS)	24
Multi-agent systems	73
Multi-agent systems design	66
Non-determinism	8
Online Social Networks	73
Ontology	66
parameter engineering	16
parameter tuning	16
Polarity Classification	78
Quality of Service	54
rule-based systems	97
Security	97
Semantic Web of Things	47
Sentiment Analysis	78
Smart Objects	60
Social gaming	85
Social Network	78
software framework	91
Spatial coordination	1
Stochastic systems	8
Text Normalization	78
Trust	97
Tuple-based coordination	1, 8
Uniform primitives	8
WADE	85
Web services	97

Table of Contents

Space-aware Coordination in ReSpecT	1
<i>Stefano Mariani and Andrea Omicini</i>	
Tuple-based Coordination of Stochastic Systems with Uniform Primitives.....	8
<i>Stefano Mariani and Andrea Omicini</i>	
Parameter Engineering vs. Parameter Tuning: the Case of Biochemical Coordination in MoK.....	16
<i>Stefano Mariani</i>	
A Multi-Agent Solution for the Interoperability Issue in Health Information Systems.....	24
<i>Paolo Sernani, Andrea Claudi, Luca Palazzo, Gianluca Dolcini and Aldo Franco Dragoni</i>	
Integrated Analysis and Synthesis of Pedestrian Dynamics: First Results in a Real World Case Study.....	30
<i>Luca Crociani, Sultan Daud Khan and Giuseppe Vizzari</i>	
A Conceptual and Computational Model for Knowledge-based Agents in ANDROID.....	41
<i>Fabio Sartori, Lorenza Manenti and Luca Grazioli</i>	
Mining the user profile from a smartphone: a multimodal agent framework	47
<i>Giuseppe Loseto, Michele Ruta, Floriano Scioscia, Eugenio Di Sciascio and Marina Mongiello</i>	
Evaluating Negotiation Cost for QoS-aware Service Composition	54
<i>Claudia Di Napoli, Dario Di Nocera and Silvia Rossi</i>	
Towards a Cloud-assisted and Agent-oriented Architecture for the Internet of Things	60
<i>Giancarlo Fortino and Wilma Russo</i>	
Ontology and Goal Model in Designing BDI Multi-Agent Systems	66
<i>Patrizia Ribino, Massimo Cossentino, Carmelo Lodato, Salvatore Lopes, Luca Sabatucci and Valeria Seidita</i>	
How to Improve Group Homogeneity in Online Social Networks	73
<i>Pasquale De Meo, Emilio Ferrara, Domenico Rosaci and Giuseppe M.L. Sarnè</i>	
Enhance Polarity Classification on Social Media through Sentiment-based Feature Expansion	78
<i>Federico Alberto Pozzi, Elisabetta Fersini, Enza Messina and Daniele Blanc</i>	
An Overview of the AMUSE Social Gaming Platform	85
<i>Federico Bergenti, Giovanni Caire and Danilo Gotta</i>	
Replaceable Implementations for Actor Systems	91
<i>Agostino Poggi</i>	
Trust Negotiation for Automated Service Integration	97
<i>Michele Tomaiuolo and Filippo Agazzi</i>	
2COMM: A commitment-based MAS architecture	104
<i>Matteo Baldoni, Cristina Baroglio and Federico Capuzzimati</i>	