# Lecture Notes in Artificial Intelligence 3228

Edited by J. G. Carbonell and J. Siekmann

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Michael G. Hinchey James L. Rash Walter F. Truszkowski Christopher A. Rouff (Eds.)

# Formal Approaches to Agent-Based Systems

Third International Workshop, FAABS 2004 Greenbelt, MD, USA, April 26-27, 2004 Revised Selected Papers



#### Series Editors

Jaime G. Carbonell, Carnegie Mellon University, Pittsburgh, PA, USA Jörg Siekmann, University of Saarland, Saarbrücken, Germany

Volume Editors

Michael G. Hinchey James L. Rash Walter F. Truszkowski NASA Goddard Space Flight Center Greenbelt, MD 20771, USA

E-mail: {michael.g.hinchey, james.l.rash, walter.f.truszkowski}@nasa.gov

Christopher A. Rouff SAIC, Advanced Concepts Business Unit 1710 SAIC Drive, McLean, VA 22102, USA E-mail: christopher.a.rouff@saic.com

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#### **Preface**

The 3rd Workshop on Formal Approaches to Agent-Based Systems (FAABS-III) was held at the Greenbelt Marriott Hotel (near NASA Goddard Space Flight Center) in April 2004 in conjunction with the IEEE Computer Society.

The first FAABS workshop was help in April 2000 and the second in October 2002. Interest in agent-based systems continues to grow and this is seen in the wide range of conferences and journals that are addressing the research in this area as well as the prototype and developmental systems that are coming into use.

Our third workshop, FAABS-III, was held in April, 2004. This volume contains the revised papers and posters presented at that workshop.

The Organizing Committee was fortunate in having significant support in the planning and organization of these events, and were privileged to have world-renowned keynote speakers Prof. J Moore (FAABS-I), Prof. Sir Roger Penrose (FAABS-II), and Prof. John McCarthy (FAABS-III), who spoke on the topic of self-aware computing systems, auguring perhaps a greater interest in autonomic computing as part of future FAABS events.

We are grateful to all who attended the workshop, presented papers or posters, and participated in panel sessions and both formal and informal discussions to make the workshop a great success. Our thanks go to the NASA Goddard Space Flight Center, Codes 588 and 581 (Software Engineering Laboratory) for their financial support and to the IEEE Computer Society (Technical Committee on Complexity in Computing) for their sponsorship and organizational assistance.

Springer once again undertook to publish the proceedings, for which we are grateful. We hope that the reader will find it a useful compilation of the state of the art in formal methods, agent-based technologies, and their intersection.

October 2004 Greenbelt, MD

### **Organization**

#### **Organizing Committee**

Mike Hinchey, NASA Goddard Space Flight Center Jim Rash, NASA Goddard Space Flight Center Walt Truszkowski, NASA Goddard Space Flight Center Chris Rouff, SAIC

## **Table of Contents**

Maxim D. Peysakhov, Vincent A. Cicirello, William C. Regli
From Abstract to Concrete Norms in Agent Institutions  Davide Grossi, Frank Dignum
Meeting the Deadline: Why, When and How Frank Dignum, Jan Broersen, Virginia Dignum, John-Jules Meyer
Multi-agent Systems Reliability, Fuzziness, and Deterrence  Michel Rudnianski, Hélène Bestougeff
Formalism Challenges of the Cougaar Model Driven Architecture  Shawn A. Bohner, Boby George, Denis Gračanin, Michael G. Hinchey57
Facilitating the Specification Capture and Transformation Process in the Development of Multi-agent Systems  Aluízio Haendchen Filho, Nuno Caminada, Edward Hermann Haeusler,  Arndt von Staa
Using Ontologies to Formalize Services Specifications in Multi-agent Systems  Karin Koogan Breitman, Aluízio Haendchen Filho,  Edward Hermann Haeusler, Arndt von Staa
Two Formal Gas Models for Multi-agent Sweeping and Obstacle Avoidance  Wesley Kerr, Diana Spears, William Spears, David Thayer111
A Formal Analysis of Potential Energy in a Multi-agent System  William M. Spears, Diana F. Spears, Rodney Heil
Agent-Based Chemical Plume Tracing Using Fluid Dynamics  Dimitri Zarzhitsky, Diana Spears, David Thayer, William Spears146
Towards Timed Automata and Multi-agent Systems  G. Hutzler, H. Klaudel, D.Y. Wang
An Approach to V&V of Embedded Adaptive Systems  Sampath Yerramalla, Yan Liu, Edgar Fuller, Bojan Cukic,  Srikanth Gururaian

#### VIII Table of Contents

Verifying Multi-agent Systems via Unbounded Model Checking  M. Kacprzak, A. Lomuscio, T. Łasica, W. Penczek, M. Szreter
Towards Symbolic Model Checking for Multi-agent Systems via OBDD's Franco Raimondi, Alessio Lomuscio
Formal Consistency Verification of Deliberative Agents with Respect to Communication Protocols  Jaime Ramírez, Angélica de Antonio
F-OWL: An Inference Engine for the Semantic Web  Youyong Zou, Tim Finin, Harry Chen
Model-Driven Architecture for Agent-Based Systems  Denis Gračanin, H. Lally Singh, Shawn A. Bohner, Michael G. Hinchey249
Apoptosis and Self-Destruct: A Contribution to Autonomic Agents?  *Roy Sterritt, Mike Hinchey
Poster Presentations
Petri Nets as Modeling Tool for Emergent Agents  Margo Bergman
Massive Multi-agent Systems Control  Jean-Charles Campagne, Alain Cardon, Etienne Collomb,  Toyoaki Nishida
Fuzzy Hybrid Deliberative/Reactive Paradigm (FHDRP)  Hengameh Sarmadi
Interaction and Communication of Agents in Networks and Language Complexity Estimates  Jan Smid, Marek Obitko, David Fisher, Walt Truszkowski
Author Index