1. Record Nr. UNISA996466011303316 Formal Approaches to Agent-Based Systems [[electronic resource]]: **Titolo** Third International Workshop, FAABS 2004, Greenbelt, MD, April 26-27, 2004, Revised Selected Papers / / edited by Michael G. Hinchey, James L. Rash, Walter F. Truszkowski, Christopher A. Rouff Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2005 **ISBN** 3-540-30960-8 Edizione [1st ed. 2005.] Descrizione fisica 1 online resource (VIII, 291 p.) Collana Lecture Notes in Artificial Intelligence;; 3228 Disciplina 629.8/0285/63 Soggetti Computer science Control engineering Artificial intelligence Software engineering Computer logic Computer simulation Computer Science, general Control and Systems Theory Artificial Intelligence Software Engineering Logics and Meanings of Programs Simulation and Modeling Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Ecology Based Decentralized Agent Management System -- Ecology Based Decentralized Agent Management System -- From Abstract to Concrete Norms in Agent Institutions -- Meeting the Deadline: Why, When and How -- Multi-agent Systems Reliability, Fuzziness, and Deterrence -- Formalism Challenges of the Cougaar Model Driven Architecture -- Facilitating the Specification Capture and Transformation Process in the Development of Multi-agent Systems --

Using Ontologies to Formalize Services Specifications in Multi-agent

Systems -- Two Formal Gas Models for Multi-agent Sweeping and Obstacle Avoidance -- A Formal Analysis of Potential Energy in a Multiagent System -- Agent-Based Chemical Plume Tracing Using Fluid Dynamics -- Towards Timed Automata and Multi-agent Systems -- An Approach to V&V of Embedded Adaptive Systems -- Verifying Multiagent Systems via Unbounded Model Checking -- Towards Symbolic Model Checking for Multi-agent Systems via obdd's -- Formal Consistency Verification of Deliberative Agents with Respect to Communication Protocols -- F-OWL: An Inference Engine for Semantic Web -- Model-Driven Architecture for Agent-Based Systems --Apoptosis and Self-Destruct: A Contribution to Autonomic Agents? --Poster Presentations -- Petri Nets as Modeling Tool for Emergent Agents -- Massive Multi-agent systems control -- Fuzzy Hybrid Deliberative/Reactive Paradigm (FHDRP) -- Interaction and Communication of Agents in Networks and Language Complexity Estimates.

Sommario/riassunto

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 wor- 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 se- 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.