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Titolo	Formal Approaches to Agent-Based Systems [[electronic resource]] : First International Workshop, FAABS 2000 Greenbelt, MD, USA, April 5-7, 2000 Revised Papers // edited by James L. Rash, Christopher A. Rouff, Walter Truszkowski, Diana Gordon, Michael G. Hinchey
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Collana	Lecture Notes in Artificial Intelligence ; ; 1871
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Soggetti	Artificial intelligence Architecture, Computer Software engineering Computer logic Mathematical logic Artificial Intelligence Computer System Implementation Software Engineering/Programming and Operating Systems Logics and Meanings of Programs Software Engineering Mathematical Logic and Formal Languages
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 at the end of each chapters and index.
Nota di contenuto	Verifying Agent's Mental States -- Model Checking-Based Analysis of Multiagent Systems -- Towards Formal Specification and Verification in Cyberspace -- Verification within the KARO Agent Theory -- Synthesizing Agents Initially -- On Formal Modeling of Agent Computations -- Modeling and Programming Devices and Web Agents -- A Programming Logic for Part of the Agent Language 3APL -- The Nepi2Programming System: A ?-Calculus-Based Approach to Agent-Based Programming -- Frameworks and Formalization -- From Livingstone to SMV -- Verification of Plan Models Using UPPAAL --

Formalization of a Spatialized Multiagent Model Using Coloured Petri Nets for the Study of an Hunting Management System -- Formal Agent Development: Framework to System -- Modeling and Execution -- Automatic Synthesis of Agent Designs in UML -- Direct Execution of Agent Specifications -- Using the λ -Calculus to Model Multiagent Systems -- Specifying and Checking Fault-Tolerant Agent-Based Protocols Using Maude -- Inter-agent Communication -- Agents Talking Faster -- Refining Interactions in a Distributed System -- Design and Mathematical Analysis of Agent-Based Systems -- Modeling Task and Teams through Game Theoretical Agents -- Web Agents Cooperating Deductively -- Adaptive Agents -- Formal Specification of Agent Behaviour through Environment Scenarios -- APT Agents: Agents That Are Adaptive Predictable and Timely -- Posters -- Ontology Negotiation in a Community of Agents -- Analysis of Agent-Based Systems Using Decision Procedures -- A Formal Approach to Belief-Goal-Role Agents -- Model Checking of Autonomy Models for an In-Situ Propellant Production System -- Adaptive Supervisory Control of Multi-agent Systems -- Machine Learning for Logic-Based Multi-agent Systems -- Using a Formal Framework for Agent System Design -- Modeling Agent-Based Systems -- Modeling Agent Systems by Bayesian Belief Networks -- The Anthropomorphizing of Intelligent Agents -- Controlling Multiple Satellite Constellations Using the TEAMAgent System -- Operations Assistants for Johnson Space Center's Mission Control Center -- A Real Time Object-Oriented Rational Agent Development System -- Panel Sessions -- Panel Discussion: "Empirical Versus Formal Methods" -- Panel Discussion: "Future Directions".

Sommario/riassunto

This book constitutes the thoroughly refereed post-proceedings of the First International Workshop on Formal Approaches to Agent-Based Systems, FAABS 2000, held in Greenbelt, MD, USA, in April 2000. The 22 revised full papers presented together with 13 posters and two panel discussion reports were carefully reviewed and improved for inclusion in the book. The papers are organized in topical sections on verifying agents' mental states, synthesizing agents initially, frameworks and formalizations, modeling and execution, inter-agent communication, and adaptive agents.
