1. Record Nr. UNISA996465961003316

Titolo	Multi-Agent and Multi-Agent-Based Simulation [[electronic resource]] : Joint Workshop MABS 2004 / / edited by Paul Davidsson, Brian Logan, Keiki Takadama
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005
ISBN	3-540-32243-4 3-540-25262-2
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (X, 265 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 3415
Disciplina	519
Soggetti	System theory Artificial intelligence Computer simulation Computer communication systems Application software Systems Theory, Control Artificial Intelligence Simulation and Modeling Computer Communication Networks Computer Appl. in Social and Behavioral Sciences Information Systems Applications (incl. Internet)
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	Simulation of Multi-agent Systems -- Smooth Scaling Ahead: Progressive MAS Simulation from Single PCs to Grids -- Agent Communication in Distributed Simulations -- Distributed Simulation of MAS -- Extending Time Management Support for Multi-agent Systems -- Designing and Implementing MABS in AKIRA -- Technique and Technology -- Work-Environment Analysis: Environment Centric Multi-agent Simulation for Design of Socio-technical Systems -- Layering Social Interaction Scenarios on Environmental Simulation -- Change Your Tags Fast! – A Necessary Condition for Cooperation? -- Users

Matter: A Multi-agent Systems Model of High Performance Computing Cluster Users -- Formal Analysis of Meeting Protocols -- Methodology and Modelling -- From KISS to KIDS – An 'Anti-simplistic' Modelling Approach -- Analysis of Learning Types in an Artificial Market -- Toward Guidelines for Modeling Learning Agents in Multiagent-Based Simulation: Implications from Q-Learning and Sarsa Agents -- Social Dynamics -- Agent-Based Modelling of Forces in Crowds -- An Investigation into the Use of Group Dynamics for Solving Social Dilemmas -- Applications -- ASAP: Agent-Based Simulator for Amusement Park -- Patchiness and Prosociality: An Agent-Based Model of Plio/Pleistocene Hominid Food Sharing -- Plant Disease Incursion Management -- A Hybrid Micro-Simulator for Determining the Effects of Governmental Control Policies on Transport Chains -- Simulation and Analysis of Shared Extended Mind.

Sommario/riassunto

This volume presents revised and extended versions of selected papers presented at the Joint Workshop on Multi-Agent and Multi-Agent-Based Simulation, a workshop federated with the 3rd International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2004), which was held in New York City, USA, July 19–23, 2004. The workshop was in part a continuation of the International Workshop on Multi-Agent-Based Simulation (MABS) series. - vised versions of papers presented at the four previous MABS workshops have been published as volumes 1534, 1979, 2581, and 2927 in the Lecture Notes in Arti? cial Intelligence series. The aim of the workshop was to provide a forum for work in both appli- tions of multi-agent-based simulation and the technical challenges of simulating large multi-agent systems (MAS). There has been considerable recent progress in modelling and analyzing multi-agent systems, and in techniques that apply MAS models to complex real-world systems such as social systems and organi- tions. Simulation is an increasingly important strand that weaves together this work. In high-risk, high-cost situations, simulations provide critical cost/bene?t leverage, and make possible explorations that cannot be carried out in situ: – Multi-agentapproachestosimulatingcomplexsystemsarekeytoolsinint-disciplinary studies of social systems. Agent-based social simulation (ABSS) researchsimulatesandsynthesizessocialbehaviorinordertounderstandrea l social systems with properties of self-organization, scalability, robustness, and openness. – IntheMAScommunity, simulationhasbeenappliedtoawiderangeofMAS research and design problems, from models of complex individual agents - ploying sophisticated internal mechanisms to models of large-scale societies of relatively simple agents which focus more on the interactions between agents.