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Altri autori (Persone)	OrenTuncer I YilmazLevent <1971->
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Nota di contenuto	Agent-Directed Simulation and Systems Engineering; Foreword; Contents; Preface; List of Contributors; Part One Background; 1 Modeling and Simulation: a Comprehensive and Integrative View; 1.1 Introduction; 1.2 Simulation: Several Perspectives; 1.2.1 Purpose of Use; 1.2.2 Problem to Be Solved; 1.2.3 Connectivity of Operations; 1.2.4 M&S as a Type of Knowledge Processing; 1.2.5 M&S from the Perspective of Philosophy of Science; 1.3 Model-Based Activities; 1.3.1 Model Building; 1.3.2 Model-Base Management; 1.3.3 Model Processing; 1.3.4 Behavior Generation 1.4 Synergies of M&S: Mutual and Higher-Order Contributions1.5 Advancement of M&S; 1.6 Preeminence of M&S; 1.6.1 Physical Tools; 1.6.2 Knowledge-Based or Soft Tools; 1.6.3 Knowledge Generation Tools; 1.7 Summary and Conclusions; 2 Autonomic Introspective Simulation Systems; 2.1 Introduction; 2.2 Perspective and Background on Autonomic Systems; 2.3 Decentralized Autonomic Simulation Systems: Prospects and Issues; 2.3.1 Motivating Scenario: Adaptive Experience Management in Distributed Mission Training; 2.3.2 An

Architectural Framework for Decentralized Autonomic Simulation Systems
2.3.3 Challenges and Issues2.4 Symbiotic Adaptive Multisimulation: An Autonomic Simulation System; 2.4.1 Metamodels for Introspection Layer Design; 2.4.2 Local Adaptation: First-Order Change via Particle Swarm Optimizer; 2.4.3 The Learning Layer: Genetic Search of Potential System Configurations; 2.4.4 SAMS Component Architecture; 2.5 Case Study: UAV Search and Attack Scenario; 2.5.1 Input Factors; 2.5.2 Agent Specifications; 2.6 Validation and Preliminary Experimentation with SAMS; 2.6.1 Face Validity of the UAV Model; 2.6.2 Experiments with the Parallel SAMS Application; 2.7 Summary
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Sommario/riassunto

The only book to present the synergy between modeling and simulation, systems engineering, and agent technologies expands the notion of agent-based simulation to also deal with agent simulation and agent-supported simulation. Accessible to both practitioners and managers, it systematically addresses designing and building agent systems from a systems engineering perspective.