1. Record Nr. UNINA9910451712503321

Titolo	Integrating geographic information systems and agent-based modeling techniques for simulating social and ecological processes [[electronic resource] /] / editor, H. Randy Gimblett
Pubbl/distr/stampa	Oxford ; ; New York, : Oxford University Press, 2002
ISBN	0-19-756181-0 1-280-53137-1 0-19-803274-9 1-4294-0224-5
Descrizione fisica	1 online resource (342 p.)
Collana	Santa Fe Institute studies in the sciences of complexity
Altri autori (Persone)	GimblettH. Randal (Howard Randal)
Disciplina	304.2 304.2015118
Soggetti	Human geography - Mathematical models Human ecology - Mathematical models Social ecology - Mathematical models Regional planning - Mathematical models Geographic information systems Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Preface; 1 Integrating Geographic Information Systems and Agent-Based Technologies for Modeling and Simulating Social and Ecological Phenomena; 2 Providing a Broad Spectrum of Agents in Spatially Explicit Simulation Models: The Gensim Approach; 3 Spatial Units as Agents: Making the Landscape an Equal Player in Agent-Based Simulations; 4 Geographic Information Systems and Agent-Based Modeling; 5 Management Application of an Agent-Based Model: Control of Cowbirds at the Landscape Scale 6 Integrating Spatial Data into an Agent-Based Modeling System: Ideas and Lessons from the Development of the Across-Trophic-Level System Simulation7 Models of Individual Decision Making in Agent-Based Simulation of Common-Pool-Resource Management Institutions; 8 An Agent-Based Approach to Environmental and Urban Systems within

Geographic Information Systems; 9 Mobile Agents with Spatial Intelligence; 10 Simulating Wildland Recreation Use and Conflicting Spatial Interactions using Rule-Driven Intelligent Agents
11 An Intelligent Agent-Based Model for Simulating and Evaluating River Trip Scenerios along the Colorado River in Grand Canyon National Park12 Agent-Based Simulations of Household Decision Making and Land Use Change near Altamira, Brazil; Index

Sommario/riassunto

This volume presents a set of coherent, cross-referenced perspectives on incorporating the spatial representation and analytical power of GIS with agent-based modelling of evolutionary and non-linear processes and phenomena.