Record Nr. UNINA9910254602603321 Agent-Based Modeling of Sustainable Behaviors / / edited by Amparo **Titolo** Alonso-Betanzos, Noelia Sánchez-Maroño, Oscar Fontenla-Romero, J. Gary Polhill, Tony Craig, Javier Bajo, Juan Manuel Corchado Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2017 **ISBN** 3-319-46331-4 Edizione [1st ed. 2017.] 1 online resource (XVII, 257 p. 86 illus., 67 illus. in color.) Descrizione fisica Understanding Complex Systems, , 1860-0832 Collana 006.30285436 Disciplina Soggetti Social sciences—Data processing Social sciences—Computer programs Game theory Economic sociology Artificial intelligence Sustainable development Computational Social Sciences Game Theory, Economics, Social and Behav. Sciences Organizational Studies, Economic Sociology Artificial Intelligence Sustainable Development Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Psychologically Plausible Models in Agent-Based Simulations of Nota di contenuto Sustainable Behavior -- Modelling Everyday Pro-Environmental Norm Transmission and Diffusion in Workplace Networks -- Empirically-Derived Behavioral Rules in Agent-Based Models Using Decision Trees Learned From Questionnaire Data -- The Implementation of the Theory of Planned Behavior in an Agent-Based Model for Waste Recycling: A Review and a Proposal -- Social Simulations Through an Agent-Based Platform, Location Data and 3D Models -- An Intersection-Centric Auction-Based Traffic Signal Control Framework -- Agentdrive: Agent-Based Simulator for Intelligent Cars and its Application for Development

of a Lane-Changing Assistant -- City Parking Allocations as a Bundle of

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Society-Aware Deals -- Sustainable Farming Behaviours: an Agent Based Modelling and LCA Perspective -- Agent-Based Simulation of Electricity Markets: Risk Management and Contracts for Difference -- Energy Management in the Smart Grids via Intelligent Storage Systems.

Using the O.D.D. (Overview, Design concepts, Detail) protocol, this title explores the role of agent-based modeling in predicting the feasibility of various approaches to sustainability. The chapters incorporated in this volume consist of real case studies to illustrate the utility of agent-based modeling and complexity theory in discovering a path to more efficient and sustainable lifestyles. The topics covered within include: households' attitudes toward recycling, designing decision trees for representing sustainable behaviors, negotiation-based parking allocation, auction-based traffic signal control, and others. This selection of papers will be of interest to social scientists who wish to learn more about agent-based modeling as well as experts in the field of agent-based modeling.