1. Record Nr. UNINA9910254816003321

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Titolo	Introduction to Computational Social Science : Principles and Applications / / by Claudio Cioffi-Revilla
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-50131-3
Edizione	[2nd ed. 2017.]
Descrizione fisica	1 online resource (XXXVI, 607 p. 59 illus., 21 illus. in color.)
Collana	Texts in Computer Science, , 1868-095X
Disciplina	300.113
Soggetti	Social sciences - Data processing Sociology - Methodology Data mining Graph theory Computer simulation Computer Application in Social and Behavioral Sciences Sociological Methods Data Mining and Knowledge Discovery Graph Theory Computer Modelling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Computation and Social Science -- Automated Information Extraction -- Social Networks -- Social Complexity I: Origins and Measurement -- Social Complexity II: Laws -- Social Complexity III: Theories -- Simulations I: Methodology -- Simulations II: Variable-Oriented Models -- Simulations III: Object-Oriented Models.
Sommario/riassunto	This indispensable textbook/reference provides a comprehensive and reader-friendly introduction to the emerging field of computational social science (CSS). Presenting a unified treatment, the text examines in detail the four key methodological approaches of automated social information extraction, social network analysis, social complexity theory, and social simulation modeling. This updated and expanded new edition has been enhanced with numerous review questions and exercises to test what has been learned, deepen understanding through

problem-solving, and to practice writing code to implement ideas and further explore the concepts. Topics and features: Contains more than a thousand problem questions and exercises, together with a list of acronyms and a glossary of terms Presents an introduction to the main areas, core concepts, and historical development of CSS, providing examples of a range of CSS investigations Examines the key similarities and differences between computers and social systems, from an information-processing perspective Presents a focus on automated information extraction, beginning with its roots in linguistics Introduces the fundamental elements of social network analysis, and computational approaches to analyzing social complexity Discusses the measurement, scientific laws, and generative theories of social complexity in CSS Reviews the methodology of social simulations, covering in detail both variable-oriented and object-oriented models This unique, clearly-written textbook is essential reading for graduate and advanced undergraduate students planning on embarking on a course on computational social science, or wishing to refresh their knowledge of the fundamental aspects of this exciting field. Dr. Claudio Cioffi-Revilla is University Professor and Professor of Computational Social Science, founding and former Chair of the Department of Computational Social Science, and founding and current Director of the Center for Social Complexity at George Mason University, VA, USA.