1. Record Nr. UNINA9910824030303321 Titolo GeoComputation / / edited by Robert J. Abrahart, Linda M. See Boca Raton, FL:,: CRC Press,, [2014] Pubbl/distr/stampa ©2014 **ISBN** 9781040075432 1040075436 9780429184864 0429184867 9781138077256 1138077259 9781466503281 1466503289 Edizione [2nd ed.] 1 online resource (470 p.) Descrizione fisica Classificazione TEC036000 Disciplina 910.285 Soggetti Information storage and retrieval systems - Geography Geographic information systems 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 at the end of each chapters. Nota di contenuto Front Cover; Contents; Foreword; Preface by Robert J. Abrahart; Preface by Linda See; Editors; Contributors; MATLAB Statement; Chapter 1: GeoComputation; Chapter 2: Modelling Spatial Morphologies: Fractal Patterns from Cellular Automata; Chapter 3: Parallel Computing in Geography; Chapter 4: The Evolving GeoWeb; Chapter 5: Geovisualisation as an Analytical Toolbox for Discovery; Chapter 6: GeoComputation: Applications in Biology; Chapter 7: Evolutionary Algorithms: Chapter 8: Genetic Programming: Magic Bullet, Poisoned Chalice or Two-Headed Monster?; Chapter 9: Agent-Based Modelling Chapter 10: E-Research and GeoComputationChapter 11: Expert Systems for Planning and Spatial Decision Support; Chapter 12: Fuzzy

Modelling; Chapter 13: Neurocomputing for GeoComputation; Chapter 14: GeoComputation and Open-Source Software: Components and

Software Component Stacks; Chapter 15: Location-Based

GeoComputation: Strategic Rethinking of the Opportunities for Outdoor Research Afforded by Mobile Devices; Chapter 16: Ubiquitous Computing, Spatial Big Data and Open GeoComputation; Chapter 17: Embedded GeoComputation: Publishing Text, Data and Software in a Reproducible Form

Chapter 18: Limits to GeoComputationChapter 19: GeoComputation in 2061; Back Cover

## Sommario/riassunto

This newly updated edition covers cutting-edge topics in computational geography, addressing a domain in both geographic and computer sciences. With an extended introduction that reviews directional changes and major advances in the field since the first edition, this book includes ten new topics as well as substantial modifications to existing chapters. Written by recognized international experts and up-and-coming researchers, the text introduces the subject matter by providing readable accounts of current developments. In addition, the authors examine possibilities for future developments through the year 2061--