

Volunteered Geographic Information and the Future of Geospatial Data

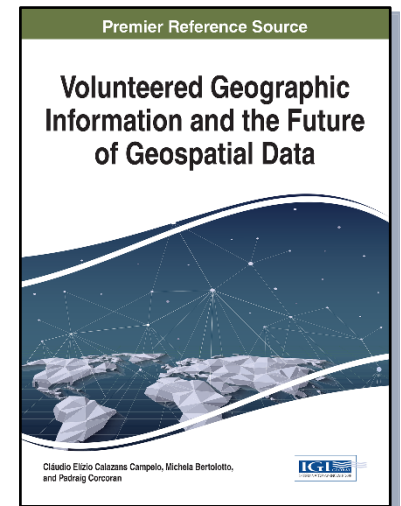
Part of the Advances in Geospatial Technologies Book Series

Cláudio Elízio Calazans Campelo (Federal University of Campina Grande, Brazil),
Michela Bertolotto (University College Dublin, Ireland) and Pdraig Corcoran (Cardiff
University, UK)

Description:

Geographic data is a valuable source of information in modern society. By utilizing alternative sources of this data, the availability and potential applications of geographic information systems can be increased.

Volunteered Geographic Information and the Future of Geospatial Data is a pivotal reference source for the latest scholarly research on information gathering from volunteers, as opposed to official agencies and private companies, to compile geospatial data. Highlighting a range of pertinent topics such as regional landscape mapping, road safety, and land usage, this book is ideally designed for researchers, academics, students, professionals, and practitioners interested in the growing area of volunteered geographic information.



ISBN: 9781522524465

Release Date: June, 2017

Copyright: 2017

Pages: 320

Topics Covered:

- Digital Rights Management
- Disaster Planning
- Educational Planning
- Land Usage
- Quality Evaluation and Assessment
- Regional Landscape Mapping
- Road Safety

Hardcover: **\$205.00**

E-Book: **\$205.00**

Hardcover + E-Book: **\$245.00**

Order Information

Phone: 717-533-8845 x100

Toll Free: 1-866-342-6657

Fax: 717-533-8661 or 717-533-7115

Online Bookstore: www.igi-global.com



Table of Contents

Chapter 1: Engaging with the Participatory Geoweb: Experiential Learning from Practice

Jon Corbett, University of British Columbia
Logan Cochrane, University of British Columbia

Chapter 2: Quality Evaluation of Volunteered Geographic Information: The Case of OpenStreetMap

Hongyu Zhang, Western University
Jacek Malczewski, Western University

Chapter 3: Traditional versus Machine Learning Techniques for OSM Quality Assessment

Musfira Jilani, National University of Ireland, Galway
Michela Bertolotto, University College Dublin
Padraig Corcoran, Cardiff University
Amerah Alghanim, University College Dublin

Chapter 4: VGI in the Geoweb: An experiment to test data reliability

Michael Buzzelli, University of Western Ontario
David Brown, The University of Western Ontario
Kenwoo Lee, The University of Western Ontario
Justin Mullin, The University of Western Ontario

Chapter 5: Quality Assessment of Volunteered Geographic Information for Educational Planning

Hafiz Muzaffar, Institute of Geographical Information Systems, National University of Sciences and Technology
Ali Tahir, Institute of Geographical Information Systems, National University of Sciences and Technology
Asmat Ali, Survey of Pakistan
Munir Ahmad, Survey of Pakistan
Gavin McArdle, UCD School of Computer Science

Chapter 6: Emotional and Subjective Volunteered Geographical Information

Jiri Panek, Department of Development Studies, Palacky University in Olomouc

Chapter 7: Using OpenStreetMap to Create Land Use and Land Cover Maps: Development of an Application

Cidália Fonte, University of Coimbra / INESC Coimbra
Joaquim Patriarca, INESC Coimbra
Marco Minghini, Politecnico di Milano
Vyron Antoniou, Hellenic Military Geographical Service
Linda See, International Institute for Applied Systems Analysis
Maria Brovelli, Politecnico di Milano

Chapter 8: Mapping Regional Landscape by Using OpenstreetMap (OSM): A Case Study to Understand Forest Patterns in Maya Zone, Mexico

Di Yang, University of Florida

Chapter 9: Leveraging Volunteered Geographic Information to improve disaster resilience: Lessons learned from AGORA and future research directions

João Albuquerque, University of Warwick
Flávio Eduardo Horita, University of São Paulo
Livia Degrossi, University of São Paulo
Roberto Rocha, University of São Paulo
Sidgley Andrade, University of São Paulo
Camilo Restrepo, University of São Paulo
Werner Leyh, University of São Paulo

Chapter 10: Quality of Urban Life Index from Location-Based Social Networks Data: A case study in Belo Horizonte, Brazil

Rodrigo Smarzaró, Universidade Federal de Viçosa
Tiago Lima, Universidade Federal de Ouro Preto (UFOP)
Clodoveu Davis Jr., Universidade Federal de Minas Gerais

Chapter 11: Improving Accessibility Through VGI and Crowsourcing

Igor Cruz, Federal University of Campina Grande
Claudio Campelo, Federal University of Campina Grande

Chapter 12: Gathering Road Safety Critical Information From Users

Ahmet Yildiz, Turk-Alman Üniversitesi

Chapter 13: Generation of a Data Model for Indoor Navigation based on Volunteered Geospatial Information (VGI)

Rahim Ali Abbaspour, University of Tehran
Simin Mirvahabi, University of Tehran

Chapter 14: Adaptive Acquisition of VGI to Fill out Gaps in Biological Observation Metadata

Daniel Cugler, Federal Institute of Triangulo Mineiro
Claudia Medeiros, University of Campinas

Chapter 15: Geospatial Digital Rights Management: Challenge To Global Spatial Data Infrastructure

Titus Ng'ang'a, University of Nairobi
Peter Wachira, University of Nairobi
Tim Wango, Kenyatta University of agriculture & Technology (JKWAT)
Joseph Ndungu, University of Nairobi
Margaret Ndungu, Technical University of Kenya

Claudio Campelo is a Lecturer in the Systems and Computing Department at the Federal University of Campina Grande (UFCG/Brazil). He obtained his Ph.D. from the School of Computing at the University of Leeds (United Kingdom) and holds M.Sc. and B.Sc. degrees from the Systems and Computing Department at UFCG/Brazil. He is currently the department head of the undergraduate program in computer science. His current research interests include topics in data modelling, knowledge representation, information retrieval, handling of conceptual vagueness, and user-aware/context-aware systems. He is particularly interested in spatial and spatio-temporal information: modelling geospatial semantics; event/process modelling; trajectory modelling and prediction; Geographic Information Retrieval (GIR); and Volunteered Geographic Information (VGI).