# Communications in Computer and Information Science 1411

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Cédric Grueau · Robert Laurini ·
Lemonia Ragia (Eds.)

# Geographical Information Systems Theory, Applications and Management

6th International Conference, GISTAM 2020
Prague, Czech Republic, May 7–9, 2020
Revised Selected Papers

Springer

*Editors*
Cédric Grueau
Polytechnic Institute of Setúbal
Setúbal, Portugal

Robert Laurini
Knowledge Systems Institute
Skokie, IL, USA

Lemonia Ragia
Technical University of Crete
Chania, Greece

# Preface

This book includes extended and revised versions of a set of selected papers from the 6th International Conference on Geographical Information Systems Theory, Applications and Management (GISTAM 2020), exceptionally held as a web-based event, due to the COVID-19 pandemic, during May 7–9, 2020.

GISTAM 2020 received 62 paper submissions from 38 countries, of which 15% were included in this book. The papers were selected by the event chairs and their selection was based on a number of criteria that included classifications and comments provided by Program Committee members, session chairs' assessments, and also the program chairs' global view of all the papers included in the technical program. The authors of selected papers were then invited to submit revised and extended versions of their papers having at least 30% innovative material.

The International Conference on Geographical Information Systems Theory, Applications and Management aims at creating a meeting point of researchers and practitioners that addresses new challenges in geo-spatial data sensing, observation, representation, processing, visualization, sharing, and managing, in all aspects concerning information communication and technologies (ICT) as well as management information systems and knowledge-based systems. The conference welcomes original papers of either practical or theoretical nature, presenting research or applications, of specialized or interdisciplinary nature, addressing any aspect of geographic information systems and technologies.

We are confident that the papers included in this book will strongly contribute to the understanding of some current research trends in geographical information systems theory, applications, and management, specifically with relation to geographic information retrieval, big data, real-time sensors, spatial information and society, spatial modeling and reasoning, spatio-temporal data acquisition, earth observation and satellite data, and ecological and environmental management.

We would like to thank all the authors for their contributions and the reviewers for their hard work which has helped ensure the quality of this publication.

May 2020

Cédric Grueau
Robert Laurini
Lemonia Ragia

# Organization

## Conference Chair

Lemonia Ragia            ATHENA Research & Innovation Information
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## Invited Speakers

| Alexander Zipf | Heidelberg University, Germany |
| Paraskevi Nomikou | National and Kapodistrian University of Athens, Greece |
| Andrew U. Frank | Vienna University of Technology, Austria |

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