## Table of Contents

**International Journal of Applied Geospatial Research**

Volume 10 • Issue 4 • October-December-2019 • ISSN: 1947-9654 • eISSN: 1947-9662

*An official publication of the Information Resources Management Association*

### Editorial Preface

iv  
Samuel Adu-Prah, Sam Houston State University, Huntsville, USA  
Donald Albert, Sam Houston State University, Huntsville, USA

### Research Articles

1  
**Mapping Activities in Recreational Trail With Spatial Video: A Case Study in Kent State University**  
Xin Hong, Kent State University, Kent, USA  
Jay Lee, Kent State University, Kent, USA

11  
**Drought Estimation-and-Projection Using Standardized Supply-Demand-Water Index and Artificial Neural Networks for Upper Tana River Basin in Kenya**  
Raphael Muli Wambua, Egerton University Department of Agricultural Engineering, Nakuru, Kenya

28  
**Location-Allocation Modeling for Emergency Evacuation Planning in a Smart City Context: The Case of Earthquake in Mytilini, Lesvos, Greece**  
Marios Batsaris, Department of Geography, University of the Aegean, Mytilene, Greece  
Dimitris Kavroudakis, Department of Geography, University of the Aegean, Mytilene, Greece  
Nikolaos A. Soulakellis, Department of Geography, University of the Aegean, Mytilene, Greece  
Themistoklis Kontos, Department of Environment, University of the Aegean, Mytilene, Greece

44  
**The Use of Spatial Analysis Approaches for Smart Decision Making of Subterranean Water**  
Panagiotis Kalaitzis, University of the Aegean, Mytilene, Greece  
Dimitris Kavroudakis, University of the Aegean, Mytilene, Greece  
Nikolaos A. Soulakellis, University of the Aegean, Mytilene, Greece

### In Memoriam

59  
**In Memoriam of Dr. Carol Hanchette**  
Charlie H Zhang, Department of Geography & Geosciences, University of Louisville, Louisville, USA  
Gary G Schwartz, Department of Population Health, School of Medicine & Health Sciences, University of North Dakota, Grand Forks, USA

### COPYRIGHT

The *International Journal of Applied Geospatial Research* (IJAGR) (ISSN 1947-9654; eISSN 1947-9662), Copyright © 2019 IGI Global. All rights, including translation into other languages reserved by the publisher. No part of this journal may be reproduced or used in any form or by any means without written permission from the publisher, except for noncommercial, educational use including classroom teaching purposes. Product or company names used in this journal are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark. The views expressed in this journal are those of the authors but not necessarily of IGI Global.

The *International Journal of Applied Geospatial Research* is indexed or listed in the following: ACM Digital Library; Bacon’s Media Directory; Cabell’s Directories; DBLP; Google Scholar; INSPEC; JournalTOCs; Library & Information Science Abstracts (LISA); MediaFinder; SCOPUS; The Standard Periodical Directory; Ulrich’s Periodicals Directory; Web of Science; Web of Science Emerging Sources Citation Index (ESCI)