Journal Editorial Board

ISSN: 2151-1950 (Print) ISSN: 2151-1969 (Online)
http://www.scirp.org/journal/jgis

Editorial Board

Dr. Alia I. Abdelmoty  
Cardiff University, UK

Dr. Tofael Ahamed  
University of Tsukuba, Japan

Prof. Dafer Algarni  
King Saud University, Saudi Arabia

Prof. Carlos Marcelo Di Bella  
Instituto de Clima y Agua CIRN-INTA Castelar, Argentina

Prof. Christophe Claramunt  
Naval Academy Research Institute, France

Prof. Wei Hong Cui  
International Europe and Asia Academy of Sciences, China

Prof. Fuchu Dai  
Chinese Academy of Sciences, China

Prof. Anrong Dang  
Tsinghua University, China

Dr. Ahmed F. Elaksher  
Cal Poly Pomona, USA

Prof. Hossein Ghadiri  
Griffith University, Australia

Prof. Shuanggen Jin  
Shanghai Astronomical Observatory, China

Dr. Mohammad Reza Khosravi  
Shiraz University of Technology, Iran

Prof. Saro Lee  
Korea Institute of Geoscience and Mineral Resources, South Korea

Dr. Xiang Li  
East China Normal University, China

Prof. Michel Mainguenaud  
Institut National des Sciences Appliquées, France

Prof. Jordi Martí-Henneberg  
University of Lleida, Spain

Prof. Hervé Martin  
Joseph Fourier University, France

Dr. Kaveh Ostad-Ali-Askari  
Islamic Azad University, Iran

Prof. Christopher James Pettit  
The University of Melbourne, Australia

Dr. Saied Pirasteh  
University of Waterloo, Canada

Prof. Biswajeet Pradhan  
Dresden University of Technology, Germany

Prof. Michael D. Proctor  
University of Central Florida, USA

Prof. Xiaosheng Qin  
Nanyang Technological University, Singapore

Prof. Shih-Lung Shaw  
University of Tennessee, USA

Dr. P. S. Sriraj  
University of Illinois at Chicago, USA

Prof. Eddy Lynn Usery  
Center of Excellence for Geospatial Information Science, USA

Dr. Herna Viktor  
University of Ottawa, Canada

Prof. Jianhua Xu  
East China Normal University, China

Prof. Xiaohuan Yang  
Chinese Academy of Sciences, China

Prof. Axing Zhu  
University of Wisconsin, USA

Dr. Liang-feng Zhu  
East China Normal University, China
# Table of Contents

**Volume 11  Number 1  February 2019**

**Comparison of Urban Growth Modeling Using Deep Belief and Neural Network Based Cellular Automata Model—A Case Study of Chennai Metropolitan Area, Tamil Nadu, India**
A. D. Aarthi, L. Gnanappazham .............................................................................................................. 1

**Web-GIS Based Visualization System of Predicted Ground Vibration Induced by Blasting in Urban Quarry Sites**
Y. Kawamura, Y. Moriyama, H. Jang ........................................................................................................... 17

**Optimization of Municipal Solid Waste Management of Bins Using GIS. A Case Study: Nuseirat City**
M. A. El-Hallaq, R. Mosabeh ...................................................................................................................... 32

**A Correlation Analysis of the Relationship between Land Use and Land Cover/Land Surface Temperature in Abuja Municipal, FCT, Nigeria**
M. E. Awuh, P. O. Japhets, M. C. Officha, A. O. Okolie, I. C. Enete ......................................................... 44

**State of Cartographic Services among the East African Community Member States**
S. N. Baariu, G. C. Mulaku, D. N. Siriba .................................................................................................. 56

**Development of Detailed Micro-Land Form Database and Its Application to Site Amplification Characteristics in Kanagawa Prefecture, Japan**
T. Ochiai, T. Enomoto .............................................................................................................................. 66

**Application of GIS for Urban Traffic Accidents: A Critical Review**
N. H. M. Aghasi ........................................................................................................................................... 82

**Assessment and Modeling of Geo-Spatial Technology and Geo-Spatial Intelligence Support for Joint Military Operations**
N. Bekele ...................................................................................................................................................... 97
Journal of Geographic Information System (JGIS)
Journal Information

SUBSCRIPTIONS


**Subscription rates:**
Print: $89 per issue.
To subscribe, please contact Journals Subscriptions Department, E-mail: [sub@scirp.org](mailto:sub@scirp.org)

SERVICES

**Advertisements**
Advertisement Sales Department, E-mail: [service@scirp.org](mailto:service@scirp.org)

**Reprints (minimum quantity 100 copies)**
E-mail: [sub@scirp.org](mailto:sub@scirp.org)

COPYRIGHT

**Copyright and reuse rights for the front matter of the journal:**
Copyright © 2019 by Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY).
[http://creativecommons.org/licenses/by/4.0/](http://creativecommons.org/licenses/by/4.0/)

**Copyright for individual papers of the journal:**
Copyright © 2019 by author(s) and Scientific Research Publishing Inc.

**Reuse rights for individual papers:**
Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

**Disclaimer of liability**
Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:
E-mail: [jgis@scirp.org](mailto:jgis@scirp.org)
Call for Papers

Journal of Geographic Information System (JGIS)

ISSN 2151-1950 (Print)   ISSN 2151-1969 (Online)
http://www.scirp.org/journal/jgis/

JGIS is an international refereed journal dedicated to the latest advancement of Geographic Information System. The goal of this journal is to keep a record of the state-of-the-art research and promote the research work in these fast moving areas. The journal publishes the highest quality, original papers included but not limited to the fields:

Subject Coverage

- Cartography and Geodesy
- Computational Geometry
- Computer Vision Applications in GIS
- Distributed, Parallel, and GPU Algorithms for GIS
- Earth Observation
- Environmental Geomatics—GIS, RS and Other Spatial Information Technologies
- Geographic Information Retrieval
- Geographical Analysis for Urban and Regional Development
- GIS and Cloud Computing
- GIS and High Performance Computing
- Human Computer Interaction and Visualization
- Image and Video Understanding
- Location Privacy, Data Sharing and Security
- Location-Based Services
- Performance Evaluation
- Photogrammetry
- Similarity Searching
- Social Networks and Volunteer Geographic
- Spatial Analysis and Integration
- Spatial and Spatio-Temporal Information Acquisition
- Spatial Data Mining and Knowledge Discovery
- Spatial Data Quality and Uncertainty
- Spatial Data Structures and Algorithms
- Spatial Data Warehousing, OLAP, and Decision Support
- Spatial Information and Society
- Spatial Modeling and Reasoning
- Spatial Query Processing and Optimization
- Spatial Semantic Web
- Spatio-Temporal Data Handling
- Spatio-Temporal Sensor Networks
- Spatio-Temporal Stream Processing
- Spatio-Textual Searching
- Standardization and Interoperability for GIS
- Storage and Indexing
- Systems, Architectures and Middleware for GIS
- Traffic Telematics
- Transportation
- Visual Languages and Querying
- Wireless, Web, and Real-Time Applications

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the JGIS.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-mail

http://www.scirp.org/journal/jgis   E-mail: jgis@scirp.org
What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

What is Open Access?

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, worldwide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- High visibility for maximum global exposure with open access publishing model
- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience

Website: http://www.scirp.org
Subscription: sub@scirp.org
Advertisement: service@scirp.org