Paper Submission

Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals. All open submissions will be peer reviewed subject to the standards of the journal. Manuscripts based on previously published conference papers must be extended substantially.

Springer offers authors, editors and reviewers of *Geoinformatica* a web-enabled online manuscript submission and review system. Our online system offers authors the ability to track the review process of their manuscript.

Manuscripts should be submitted to: [http://gein.edmgr.com](http://gein.edmgr.com). This online system offers easy and straightforward log-in and submission procedures, and supports a wide range of submission file formats.

**Important Dates**
- **Paper Submission:** 12 January 2015
- **Acceptance notification:** 23 March 2015
- **Final Papers Due:** 20 April 2015

Call for Papers

**Special Issue on Big Spatial and Spatiotemporal Data Management and Analytics**

**Guest Editors:**
- Dr. Raju Vatsavai
  Computational Sciences and Engineering Division
  Oak Ridge National Laboratory, TN, USA
  rvatsavai@acm.org
- Dr. Varun Chandola
  Department of Computer Science and Engineering University at Buffalo (UB)
  chandola@buffalo.edu

We are living in the era of ‘Big Data.’ Spatiotemporal data, whether captured through remote sensors (e.g., remote sensing imagery, Atmospheric Radiation Measurement (ARM) data) or large scale simulations (e.g., climate data) has always been ‘Big.’ However, with advances in remote sensors, sensor networks, and the proliferation of location sensing devices in daily life activities and common business practices, the generation of disparate, dynamic, and geographically distributed spatiotemporal data has exploded in recent years. Though these improvements are leading to big data and making it hard to manage and process, they are also enabling new applications. For example, multispectral and temporal remote sensing data can be used for monitoring biomass to nuclear proliferation, mapping crops to human settlements. Likewise streaming geosocial media data can be exploited for better understanding the pulse of the cities or for generating near-real time alerts for emergency responders. However novel and scalable data management and analytical frameworks are needed to meet the challenges posed by the big spatial and spatiotemporal data.

The purpose of this special issue is to seek high quality research papers that contribute to the advancement of knowledge in big spatiotemporal data management and analytics. Researchers and practitioners are invited to submit original papers addressing topics including but not limited to the following:

- Scalable algorithms for spatial and spatiotemporal data mining
- Novel algorithms on high performance computing frameworks (Clusters, GPU, Cloud, Grid)
- Performance studies comparing clouds, grids, and clusters
- Novel indexing methods for massive geospatial data
- Visualization of massive geospatial data
- Customizations and extensions of existing software infrastructures such as Hadoop for spatial, and spatiotemporal data management and analysis
- NoSQL solutions for big spatiotemporal data

Applications of big data analysis: Climate Change, Disaster Management, Monitoring Critical Infrastructures, Transportation, Geospatial Intelligence, Location Based Services, Smart Cities, Energy

All papers will undergo the same rigorous GEIN review process. Please refer to the GEIN website for detailed instructions on paper submission. Please choose “Special Issue: Big Spatial Data” as the Article Type.