

The 1st round Cfp of EM-GIS 2016

The 2nd Workshop on Emergency Management using GIS will be held in San Francisco, USA on the 31st October 2016 and be hosted by ACM SIGSPATIAL.

Aim of EM-GIS 2016

Emergency management aims to develop strategies and establish operations to decrease the potential impact of unexpected events (i.e., human or natural disasters). By quick response and rescue, it saves human lives from the secondary disasters and enhances the stability of communities after disasters.

Emergency management involves four stages: Planning and Mitigation, Preparedness, Response and Recovery. Geospatial applications (including GIS) have been extensively used in each stage of emergency management. Decision-makers can utilize the geospatial information to develop planning and mitigation strategies. GIS models and simulation capabilities are used to exercise response and recovery plans during non-disaster times. They help the decision-makers understand near real-time possibilities during an event. Once disaster occurs, GIS will take effect in real time response and recovery activities. For example, in the Great Earthquake of Nepal in April 2015, the DigitalGlobe supplied plenty of remote sensing and geographic data for rescue.

Emergency management has drawn the attention of government entities and researchers. For example, there is a major national research program on emergency management in China. As part of this program, researchers have completed considerable cutting-edge work on emergency management. However, due to the multi-faceted complexity of emergency situations, plenty of data and models are utilized in the whole process. How to integrate these data and models, such as the integration of the GIS data layers and dangerous chemicals diffusion data, appears as a big issue faced by emergency management. Furthermore, emergency management requires lots of new geospatial technologies to support the quick response and recovery and the integrating of location-based wireless information streams. With the advances of GIS technologies, the improvement of emergency management research becomes possible.

EM-GIS 2015 (<http://www.dviz.cn/em-gis2015/>) was held in conjunction with the 23rd ACM SIGSPATIAL on November 3, 2015 in Seattle, Washington, USA. EM-GIS 2015 received 35 submissions in which 12 research papers

were accepted as full research papers and 9 were accepted as short papers. All the papers were presented on the workshop (20 or 15 minutes for each paper). EM-GIS 2015 was a one-day workshop consisting of four sessions: (1) EM-GIS Applications, (2) EM-GIS strategies, (3) EM-GIS Analytics and (4) HealthGIS research.

The purpose of the EM-GIS 2016 workshop is to provide a forum for researchers and practitioners to exchange ideas and progress in related areas. This workshop in the ACM SIGSPATIAL conference addresses the challenges of emergency management based on advanced GIS technologies. This workshop will bring together researchers and practitioners in massive spatio-temporal data management, spatial database, spatial data analysis, spatial data visualization, data integration, model integration, cloud computing, parallel algorithms, internet of things, complex event detection, optimization theory, intelligent transportation systems and social networks to support better public policy through disaster detection, response and rescue.

Topics of Interest

The EM-GIS 2016 workshop welcomes papers that address fundamental research issues in this challenging area, with emphasis on GIS applications associated with emergency management. We also encourage papers to report on system level research related to new technologies in GIS, data integration, model integration, disaster detection, response and rescue. A number of invited papers will also be solicited.

Topics of interest include, but are not limited to:

- Spatial data and models for emergency management
- Data integration in emergency management
- Model integration in emergency management
- Geospatial data mining applications in emergency management
- Decision support based on GIS for emergency management
- Statistical analysis on massive spatio-temporal data for emergency management
- Spatial data analytics in emergency management
- Spatial agent-based modeling for emergency management
- Event detection techniques based on GIS in emergency management
- Opinion mining and sentiment analysis based on GIS for emergency management
- Prediction and decision based on GIS in emergency management
- Location based rescue resource management in emergency management
- Resource planning and scheduling base on GIS
- Cloud computing based on GIS in emergency management
- Web spatial data analysis in emergency management

- Web spatial data processing in emergency management
- Web of things based on GIS in emergency management
- Spatiotemporal intelligence for spontaneous planning

Publications

All accepted papers will be embodied in ACM SIGSPATIAL proceeding. The selected papers presented at the conference will be selected for publications in Geoinformatica (<http://link.springer.com/journal/10707>) as Special Issue on Spatial Computing in Emergency Management. All accepted papers will be recommended to Data Science Journal (<http://datascience.codata.org/>). The authors should be responsible for the possible additional journal publication fee.

Award

The workshop will offer two Best Paper awards. Each winner will be awarded a certificate with signatures of the workshop co-chairs.

Paper Submission

We invite two types of submissions in the workshop:

1. **Regular Research Papers:** these papers should be original research work. The paper should be **at most 8 pages**.
2. **Short papers:** these papers should present novel research directions or raise challenging problems. The paper should be **at most 4 pages**.

Manuscripts should be submitted in PDF format according to the ACM camera-ready templates available at <http://www.acm.org/sigs/pubs/proceed/template.html>.

Papers must be electronically submitted at the following address:
<https://easychair.org/conferences/?conf=emgis2016>.

Each paper will be reviewed by at least 3 referees. The workshop proceedings will also be part of the ACM Digital Library. At least one of the authors per accepted workshop paper should register for both the main SIGSPATIAL conference and the workshop, and present the paper in the workshop in order to have the paper included in the workshop proceedings.

Important Dates

- Full paper due: August 31, 2016
- Author notification: September 28, 2016
- Camera-Ready deadline: October 7, 2016

- EM-GIS 2016:Monday October 31, 2016

General Chair

- Hui Zhang Tsinghua University, China, zhui@mail.tsinghua.edu.cn
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