

AAG 2012 CFP: Spatio-Temporal Data Mining and Visual Analytics

Organized by:

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Sponsored by:

Geographic Information Science Specialty Group

Spatial Analysis and Modeling Specialty Group

Cartography Specialty Group

Due to the ubiquity of location-aware technologies, surveys, and social media, large and complex spatio-temporal data have become increasingly available, such as massive mobility data, spatially embedded social networks, high-resolution remote sensing images, public health data, climate change data, etc. While these data offer unprecedented opportunities to advance our understanding of complex geographic processes and phenomena, there are many challenging research questions in analyzing such spatio-temporal data to obtain new knowledge. This special session(s) invites research contributions in the theory, methodology, implementation, and application of spatial data mining and visual analytics for analyzing spatio-temporal data. Potential topics include (but not limited to):

- Computational, statistical, and/or visual analytical methodologies for the analysis, mining, and mapping of spatio-temporal data, such as trajectories, spatio-temporal graphs, social networks, geocoded videos/images, time series, etc.
- Theories, models, and methods to represent, quantify, and discover new types of spatio-temporal patterns/relationships.
- Domain-specific spatio-temporal data analysis such as: public health, spatial epidemiology, transportation, urban mobility, climate change, crime analysis, among others.
- Spatio-temporal simulation and synthetic spatio-temporal benchmark data generation
- Applications of existing or new methods to support decision-making, planning, and/or education
- Data collection techniques for new types of spatio-temporal data, e.g., from texts, videos, images, twitter messages, blogs, etc.
- New frameworks for spatio-temporal data management, analysis, and service, such as HPC-, Cloud-, or GPU-based computing, mobile computing and visualization, etc.

To present a paper in the session(s):

- Register and submit your abstract online (<http://www.aag.org/cs/annualmeeting>).
- Email your presenter identification number (PIN), paper title, and abstract to guod@sc.edu by September 24 (Saturday), 2011.