



## AAG Annual Meeting

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### Paper Session:

#### 1488 Spatial Data Mining and Big Data Analytics (3)

is scheduled on Tuesday, 4/21/2015, from 12:40 PM - 2:20 PM in 304 Classroom, University of Chicago Gleacher Center, 3rd Floor

#### Sponsorship(s):

Geographic Information Science and Systems Specialty Group  
Spatial Analysis and Modeling Specialty Group  
Cartography Specialty Group

#### Organizer(s):

[Diansheng Guo](#) - UNIVERSITY OF SOUTH CAROLINA  
[Harvey J. Miller](#) - The Ohio State University  
[May Yuan](#) - University of Texas - Dallas

#### Chair(s):

[May Yuan](#) - University of Texas - Dallas

#### Abstract(s):

**12:40 PM Author(s):** \*Sterling Quinn - The Pennsylvania State University

Abstract Title: *Computing and visualizing nonlocal influence in OpenStreetMap: An analysis of South America*

**1:00 PM Author(s):** \*Xuwei Chen - Northern Illinois University

Abstract Title: *Mining Socioeconomic and Environmental Associations with Public Health*

**1:20 PM Author(s):** \*Liem Tran, Ph.D. - University of Tennessee at Knoxville

Abstract Title: *Determine Variance Contribution of Interrelated Variables in a Large Spatial Dataset*

**1:40 PM Author(s):** \*Bing She - University of Michigan  
Shuming Bao - University of Michigan

Abstract Title: *Comparative analytics of China and US Census Data in a Geoportal for Global Studies*

**2:00 PM Author(s):** \*Linda Blade - University of Liverpool  
Chris Lloyd - University of Liverpool

Abstract Title: *A Local Regression Analysis of Accidents and Injuries in the Workplace*

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**Session Description:** Big and dynamic spatial data have been, and continue to be, collected with modern data acquisition techniques such as global positioning systems (GPS), high-resolution remote sensing, census surveys, and internet-based volunteered geographic information. 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 data to obtain new knowledge. We invite research contributions in the theory, methodology, implementation, and application of spatial data mining, simulation, and visual analytics for big spatial data analytics.

Potential topics include (but not limited to):

Theories and models to represent, quantify, and enable discovery of new types of spatial patterns and relationships;

Computational, statistical, and visual analytical methodologies for big data analytics, knowledge discovery, and decision support in geographic domains;

Domain-specific data analytics and applications: public health, spatial epidemiology, transportation, urban mobility, climate change, crime analysis, migration, geo-social networks, among others;

Simulation, benchmark data generation, complexity modeling, predictive analytics;

Big data collection, curating and management methodologies for heterogeneous data, e.g., texts, videos, images, etc.

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New Query