



University Consortium for  
GEOGRAPHIC INFORMATION SCIENCE

## Frontiers in Geospatial Data Science *A combined CaGIS AutoCarto and UCGIS Symposium*

May 22-24, 2018

Concourse Hotel

Madison, Wisconsin, U.S.A.

### First Call for Participation

The Cartography and Geographic Information Society (CaGIS) and the University Consortium for Geographic Information Science (UCGIS) are pleased to announce a joint AutoCarto Conference and Symposium that will explore the *Frontiers of Geospatial Data Science*. We will consider connections between Geospatial Science and the burgeoning field of Data Science, seen in newly named academic departments and calls for funded research. At this event we will learn about emerging opportunities and challenges for the geospatial and mapping sciences with an eye on trends in deep learning, data-intensive computing platforms, and visualization, as well as geospatial big data sources and applications such as location-aware social media, autonomous vehicles, and earth-observing micro- and nano-satellites and sensors.

CaGIS and UCGIS invite cartographers, geographers, GIScientists, data scientists and others conducting research on the cutting edge of the geospatial sciences to make presentations on the types of topics listed below. **Of particular interest are research topics that highlight synergies between geospatial and data sciences for advancing theories and applications.**

- Geospatial Data Science • Mobile Mapping • Geovisualization •
  - Open Source • Decision Analytics •
- Geolocation Privacy • Machine Learning • Interoperability •
  - VGI • Data & Navigation for Autonomous Vehicles •
  - Statistical Mapping • Mapping and Climate Change •
  - LIDAR • Multispectral Data • Unmanned Aerial Systems •
- Spatial Cognition • Database Challenges • Statistical Modeling in GIS •
  - Semantic Web • Ontologies • Spatial-temporal GIS •
  - Image Segmentation • Dynamic Mapping •

#### Steps for Participation:

For **research papers**, **poster sessions** and **lightning talks**, submit an appropriately-sized abstract as indicated below. We are also soliciting brief **position papers** on the overall theme of how geospatial science connects within the larger data sciences, especially with regards to curricula and degrees. Position papers will be made available to all participants prior to the conference. All submissions will be made using EasyChair, within which you will indicate your preferred presentation format (research paper, position paper, poster, or lightning talk). All abstract and statement submissions are due February 1, 2018 (<https://easychair.org/conferences/?conf=ucgisautocarto2018>).

- Position paper that addresses the key roles for the geospatial sciences within the broader realm of data sciences curricula and degrees
  - Submit a 1000-word statement
- Research paper presented at the meeting only:
  - Submit a 500-word abstract
- Research paper for the meeting AND to be considered in a special issue of the CaGIS Journal:
  - Submit a 1500-word abstract that includes the research question, brief literature review and description of methods, and a brief description of findings.
  - The editor of CaGIS and the CaGIS editorial board will review these 1500 word abstracts and will invite submission of full papers to be peer reviewed for consideration in the special issue of CaGIS that is scheduled to be published by the end of 2018.
- Poster at the meeting
  - Submit a 500-word abstract
- Lightning talk at the meeting:
  - Submit a 500-word abstract

**All** submissions will be reviewed by the program committee. Because of the limited number of sessions planned for this conference, all abstracts may not be selected for presentation. The final decision on acceptances for the program will depend on the relevance of submissions to the theme as well as space availability. Participants whose abstracts are selected are expected to acknowledge receipt of the acceptance letter by email, verifying their intent to attend and make a presentation at the conference, and are required to register before April 15, 2018, to be included in the program. An edited conference proceedings of all accepted abstracts and position papers will be available online on the CaGIS and UCGIS websites.

### **Important Dates**

February 1, 2018. All submissions are due.

March 15, 2018. Decision for accepted submissions will be emailed.

May 15, 2018. Full research papers to be reviewed for publication in CaGIS are due.

Instructions for submission will be included with the invitation to submit.

May 22, 2018. Conference begins.

### **Registration Requirements**

Every paper, poster, or lightning talk presenter is required to register for the AutoCarto/UCGIS Symposium no later than April 15, 2018. Presenters who do not register by that date may be dropped from the program.

### **Program Committee**

Daniel Cole, Smithsonian Institution

Scott Friendschuh, Executive Director of CaGIS and University of New Mexico

Karen Kemp, University of Southern California

Ross Meentemeyer, North Carolina State University

Ian Muehlenhaus, University of Wisconsin

Shashi Shekhar, University of Minnesota

Diana Sinton, Executive Director of UCGIS and Cornell University