



SIGSPATIAL

# 17<sup>th</sup> ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIALGIS 2009) November 4-6, 2009, Seattle, WA, USA



The ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems 2009 (ACM GIS 2009) is the seventeenth event of a series of symposia and workshops that began in 1993 with the aim of bringing together researchers, developers, users, and practitioners carrying out research and development in novel systems based on geo-spatial data and knowledge, and fostering interdisciplinary discussions and research in all aspects of geographic information systems. The conference provides a forum for original research contributions covering all conceptual, design, and implementation aspects of GIS ranging from applications, user interface considerations, and visualization down to storage management and indexing issues. This year's conference builds on last year's conference great success and on being the premier annual conference of the ACM Special Interest Group on Spatial Information (ACM SIGSPATIAL). Researchers, students, and practitioners are invited to submit their contributions to this year's ACM GIS. Suggested topics include but are not limited to:

- Cartography and Geodesy
- Computational Geometry
- Computer Vision Applications in GIS
- Distributed, Parallel, and GPU algorithms for GIS
- Earth Observation
- Geographic Information Retrieval
- Human Computer Interaction and Visualization
- Image and Video Understanding
- Location-based Services
- Location Privacy, Data Sharing and Security
- Performance Evaluation
- Photogrammetry
- Similarity Searching
- Spatial Analysis and Integration
- Spatial and Spatio-temporal Information Acquisition
- Spatial Data Mining and Knowledge Discovery
- Spatial Data Quality and Uncertainty
- Spatial Data Structures and Algorithms
- Spatial Data Warehousing, OLAP, and Decision Support
- Spatial Information and Society
- Spatial Modeling and Reasoning
- Spatial Query Processing and Optimization
- Spatio-temporal Data Handling
- Spatio-temporal Sensor Networks
- Spatio-temporal Stream Processing
- Spatio-textual Searching
- Standardization and Interoperability for GIS
- Storage and Indexing
- Systems, Architectures and Middleware for GIS
- Traffic Telematics
- Transportation
- Urban and Environmental Planning
- Visual Languages and Querying
- Wireless, Web, and Real-time Applications

### Invited Speakers

Pat Hanrahan, Stanford University  
Gur Kimchi, Microsoft Virtual Earth

**Paper Format:** Authors are invited to submit full, original, unpublished research papers that are not being considered for publication in any other forum. Manuscripts should be submitted in PDF format and formatted using the ACM camera-ready templates available at <http://www.acm.org/sigs/pubs/proceed/template.html>. Papers cannot exceed 10 pages in length. In addition to the regular full-length papers, the Program Committee may accept some as poster papers which may be requested to be shortened. All submitted papers will be refereed for quality, originality, and relevance by the Program Committee. The acceptance/rejection of papers will be based on review results. All questions should be addressed to the Program Committee Chairs. Some accepted submissions may receive a best paper/poster award.

**Ph.D. Dissertation Showcase Paper Format:** Ph.D. students are encouraged to submit their Ph.D. research contributions and work-in-progress. Submissions cannot exceed 6 pages -- Add (Ph.D. Showcase) to the title. Student authors of the accepted papers will be given an opportunity to present a summary of their research at the conference. Successful Ph.D. showcase papers will appear in the ACM SIGSPATIAL Newsletter.

**Industrial Paper Format:** Authors are invited to submit industrial experience papers that describe their original industrial experiences, challenges, and applications to be presented during the conference. Industrial paper submissions cannot exceed 10 pages -- Add (Industrial Paper) to the title.

**Demonstration Paper Format:** Authors are invited to submit demo papers that describe their original demonstrations to be presented during the conference. Demo paper submissions cannot exceed 2 pages -- Add (Demo Paper) to the title.

**Submission:** Submissions will be made electronically and online only at: <http://acmgis09.cs.umn.edu>. One author per accepted paper, poster, PhD. Dissertation showcase, industrial paper, or demo is required to register and attend the conference and to present the accepted submission. Otherwise, the accepted submission will not appear in the published conference proceedings or in the ACM Digital Library version of the conference proceedings. All questions should be addressed to the Program Committee Chairs.

### Conference Officers

- General Chair:**  
Ouri Wolfson, University of Illinois at Chicago
- General Co-Chairs:**  
Divyakant Agrawal, University of California, Santa Barbara  
Chang-Tien Lu, Virginia Tech
- General Vice-Chair:**  
Cyrus Shahabi, University of Southern California
- Program Committee Co-chairs:**  
Mohamed Mokbel, University of Minnesota  
Peter Scheuermann, Northwestern University
- Program Committee Vice Chair:**  
Walid G. Aref, Purdue University
- Local Arrangements Co-Chairs:**  
John Krumm, Microsoft, USA  
Mohamed Ali, Microsoft, USA
- Treasurer:**  
Yan Huang, University of North Texas
- Publicity Chair:**  
Judy Cushing, Evergreen College
- Proceedings Co-Chairs:**  
Andrew Danner, Swarthmore College  
Alejandro Pauly, University of Florida
- Poster Chair:**  
Jagan Sankaranarayanan, University of Maryland

### Important Dates All Submission Types

- Abstract Submission:** June 25, 2009  
**Full Submission:** July 2, 2009  
**Notification:** August 24, 2009  
**Camera-Ready:** September 6, 2009