



SIGSPATIAL

**18<sup>th</sup> ACM SIGSPATIAL International Conference on  
Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2010)**  
November 2-5, 2010, San Jose, CA, USA  
<http://acmgis2010.cs.ucsb.edu/>

The *ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems 2010 (ACM SIGSPATIAL GIS 2010)* is the eighteenth event in 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 geospatial 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 interfaces, and visualization to storage management and indexing issues. This conference is the premier annual event of the ACM Special Interest Group on Spatial Information (ACM SIGSPATIAL). Researchers, students, and practitioners are invited to submit their contributions to ACM SIGSPATIAL GIS 2010.

Suggested topics include but are not limited to:

- Cartography and Geodesy
- Computational Geometry
- Computer Vision Applications in GIS
- Distributed and Parallel 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
- GIS Performance Evaluation
- Photogrammetry
- Similarity Searching
- Spatial Analysis and Integration
- Spatial and Spatio-temporal Data Acquisition
- Spatio-temporal Data Analysis
- Spatial Data Mining and Knowledge Discovery
- Spatial Data Quality and Uncertainty
- GPU and Novel Hardware Solutions for GIS
- 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 Management
- Spatio-temporal Sensor Networks
- Spatio-temporal Stream Processing
- Spatio-textual Searching
- Standardization and Interoperability for GIS
- Storage and Indexing
- GIS Architectures and Middleware
- Traffic Telematics
- Transportation
- Urban and Environmental Planning
- Visual Languages and Querying
- Wireless, Web, and Real-time Applications

**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>. Submission length is limited to 10 pages. 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. Accepted papers will be considered for “Best Paper Award”.

**Ph.D. Dissertation Showcase Paper Format:** Ph.D. students are encouraged to submit their Ph.D. research contributions and work-in-progress. Submission length is limited to 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 submission length is limited to 10 pages -- Add (Industrial Paper) to the title. The accepted industrial experience papers will appear in the Conference Proceedings.

**Demonstration Paper Format:** Authors are invited to submit demo papers that describe their original demonstrations to be presented during the conference. Submission length is limited to 2 pages -- Add (Demo Paper) to the title. The accepted demo papers will appear in the Conference Proceedings.

**Submission:** Submissions should be uploaded through the submission site at: <https://cmt.research.microsoft.com/GIS2010/Default.aspx>. One author per accepted paper, poster, Ph.D. 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 PC Chair.

**Workshop Proposals:** ACM SIGSPATIAL GIS 2010 will hold one day workshops on November 2, 2010. Hence, it invites proposals for workshops to be submitted in PDF format to the Workshop Chair. The proceedings of the workshops will be published in the ACM Digital Library. For details on how to prepare a workshop proposal and what the workshops entail, see <http://acmgis2010.cs.ucsb.edu/workshops>.

**Conference Officers**

**General Chairs:**

Divyakant Agrawal, UC Santa Barbara  
Pusheng Zhang, Microsoft, USA

**Program Committee Chairs:**

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**Poster Co-Chairs:**

Mohamed Ali, Microsoft, USA  
Jagan Sankaranarayanan, University of Maryland

**Registration Chair:**

Chengyang Zhang, University of North Texas

**Important Dates (All Submissions)**

**Abstract Submission:** June 24, 2010  
**Full Submission:** July 1, 2010  
**Notification:** September 2, 2010  
**Camera-Ready:** September 9, 2010

**Important Dates (Workshops)**

**Proposal Submission:** May 15, 2010  
**Notification:** June 15, 2010