15th ACM International Symposium on **Advances in Geographic Information Systems (ACM GIS 2007)**

In Cooperation with



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The ACM International Symposium on Advances in Geographic Information Systems in 2007 (ACM GIS 2007) is the fifteenth 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 symposium provides a forum for original research contributions covering all conceptual, design, and implementation aspects of GIS and ranging from applications, user interface considerations, and visualization down to storage management and indexing issues. This year, a novelty is that ACM GIS has separated from its long-time host conference in order to become independent and more visible to the GIS community, further expand the spectrum of research topics covered by the symposium, and grow over the next years. Suggested topics include but are not limited to:

Modeling and Querying

- Constraint approach for spatial databases
- Spatial data quality
- Image Databases
- Integration and management of raster and vector data
- Spatial and spatio-temporal data modeling
- Spatial and spatio-temporal data mining and knowledge discovery
- Spatial and spatio-temporal predicates
- Spatial and spatio-temporal query languages
- Spatial and spatio-temporal reasoning
- Spatial and spatio-temporal uncertainty, vagueness, and fuzziness
- Visual query languages
- · Spatial and spatio-temporal visualization and analysis
- 3D spatial modeling

Systems and Implementation

- Computational geometry
- Geospatial data integration
- Geospatial data versioning
- Interoperability and standards
- · Large-scale GIS servers and parallel GIS
- Middleware architectures
- Multiple representations in spatial databases
- Performance metrics and issues
- Query processing
- · Spatial data warehousing and decision support
- Spatial query processing and optimization
- Spatial, spatio-temporal, and multidimensional access methods
- Spatial data mining
- Stream processing

Applications like

- Earth observation
- · Geosensor networks
- Geovisualization
- · Image databases
- Location-based services
- Mobile and distributed geographic computing and information services
- Novel and challenging applications
- Photogrammetry
- Real-time applications
- Risk prevention
- Spatial and spatio-temporal Online Analytical Processing (OLAP)
- Traffic telematics
- Transportation
- Urban and environmental planning
- Web applications
- · Wireless networks

Program Committee

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Paper Format and Submission

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 8 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. Submissions will be done electronically and online only. The online submission system will be available from April 30, 2007.

Important Dates

Abstract Submission: June 11, 2007 Notification of Acceptance: August 11, 2007 Full Paper Submission: June 18, 2007 Camera Ready Copy: August 31, 2007

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