26th ACM SIGSPATIAL International Conference on
Advances in Geographic Information Systems (ACM SIGSPATIAL 2018)
Tuesday November 6 – Friday November 9, 2018
Seattle, Washington, USA

Call for papers including research, systems, industrial experience, demonstration, and vision papers. Call for workshop proposals.

The *ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems* 2018 (*ACM SIGSPATIAL 2018*) is the twenty sixth event in a series of symposia and workshops that began in 1993 with the aim of bringing together researchers, developers, users, and practitioners in relation to 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 geospatial data ranging from applications, user interfaces, and visualization to data storage and query processing and indexing. The 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 2018. This year the conference is going to have **firm submission deadlines**, ending the previous tradition of deadline extensions.

Suggested Geospatial-related topics include but are not limited to the following:

- Cartography and Geodesy
- Computational Geometry
- Computer Graphics Applications
- Computer Vision Applications
- Distributed and Parallel Algorithms
- Earth Observation
- Geographic Information Retrieval
- Geospatial Architectures and Middleware
- GPU and Novel Hardware Solutions
- Human Computer Interaction and Visualization
- Image and Video Understanding
- Location-Based Services
- Location Privacy, Data Sharing and Security
- Mobile Systems and Vehicular Ad Hoc Networks
- Object Tracking and RFIDs
- 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
- 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
- Storage and Indexing
- Traffic Telematics
- Transportation
- Urban and Environmental Planning
- Visual Languages and Querying
- Web and Real-Time Applications

Conference Officers

General Chairs:
Farnoush Banaei-Kashani, U. Colorado Denver, USA
Erik Hoel, ESRI, USA
Program Committee Chairs:
Ralf Güting, U. of Hagen, Germany
Roberto Tamassia, Brown U., USA
Li Xiong, Emory U., USA
Local Arrangements Chairs:
James Biagioni, Amazon, USA
Ahmed Eldawy, U. California, Riverside, USA
Hien To, Amazon, USA
Treasurer Chairs:
Wei-Shinn Ku, Auburn U., USA
Amr Magdy, U. of California, Riverside, USA
Sponsors Chairs:
Mark McKenney, Southern Illinois U., USA
Chengyang Zhang, Amazon, USA
Workshops Chairs:
John Krumm, Microsoft Research, USA
Mohamed Sarwat, Arizona State U., USA
Publicity Chairs:
Muhammad Aamir Cheema, Monash U., Australia
Sangho Kim, ESRI, USA
Yanhua Li, Worcester Polytechnic Institute, USA
Proceedings Chairs:
Gabriel Ghinita, UMass, USA
Raymond Wong, HKUST, China
Poster Chairs:
Martin Werner, Leibniz-University Hanover, Germany
Xun Zhou, U. of Iowa, USA
Contest Chairs:
Dev Oliver, ESRI, USA
Bo Xu, HERE, USA
Yuanyuan Pao, Lyft, USA
Student Research Competition Chairs:
Fusheng Wang, Stony Brook U., USA
Kyriakos Mouratidis, SMU, Singapore
Registration Chairs:
Jing (David) Dai, Google, USA
Zhenhui Li, Penn. State U., USA
Webmaster:
Chrys Anastasiou, U. Southern California, USA
Xu Teng, Iowa State U., USA

Abstract Submission (all submissions): June 5th

Paper Format: Manuscripts should be submitted in PDF format and formatted using the ACM camera-ready templates available at http://www.acm.org/publications/proceedings-template. It is important that previous related work (especially appearing in prior editions of the ACM SIGSPATIAL Conference and the ACM SIGSPATIAL workshops/symposia) be appropriately cited. All submissions will be refereed for quality, originality, and relevance by the Program Committee. Accepted papers will be considered for a "Best Paper Award."

Research, Systems, and Industrial Experience Papers: Authors are invited to submit original, unpublished research papers that are not being considered for publication in any other forum. In addition to regular research papers, authors are invited to submit systems papers, which focus on novel system architectures and software applications, and industrial experience papers, which describe original industrial experiences, challenges, and practical applications. For these papers, authors should append "(Systems Paper)" or "(Industrial Paper)" to the title, respectively. Submissions are limited to 10 pages. The Program Committee may accept submissions either as 10-page full papers for oral presentations or as 4-page poster papers for poster presentation. Both full and poster papers will appear in the conference proceedings.

Demonstration Papers: Authors are invited to submit demo papers describing original systems for demonstration presentation at the conference. Submissions are limited to 4 pages and "(Demo Paper)" should be appended to the title. Accepted demo papers will appear in the conference proceedings.

Vision Papers: Authors are invited to submit vision papers describing visionary ideas to be presented at the conference. Submissions are limited to 4 pages and "(Vision Paper)" should be appended to the title. Accepted vision papers will appear in the conference proceedings. Awards in the amount of $1,000, $750, and $500 are expected to be provided to the first, second, and third best vision papers.

Registration and Presentation: At least one author per accepted research, systems, industrial experience, demonstration, or vision paper must register and attend the conference to present the accepted submission. Otherwise, the accepted submission will not appear in the conference proceedings or in the ACM Digital Library version of the conference proceedings.

Workshop Proposals: One-day workshops will be held on Tuesday November 6, 2018. Workshop proposals are to be submitted in PDF format to the Workshops Chairs. The proceedings of the workshops will appear in the ACM Digital Library. All proposers and organizers of accepted workshops must register for the workshop or the workshop will be canceled. Workshop proposal submission deadline is May 1st.

Programming Contest: The ACM SIGSPATIAL CUP 2018, with prizes, is a geospatial-focused algorithm competition.

For the latest information please see the conference website: http://sigspatial2018.sigspatial.org/