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**16th ACM SIGSPATIAL International
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Geographic Information Systems
(ACM GIS 2008)**



November 5-7, 2008. Irvine, California, USA

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Preface

These proceedings contain the papers selected for publication and presentation at the 16th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM GIS) in Irvine, California, USA, from November 5th to 7th, 2008. ACM GIS 2008 is the sixteenth event of an annual series of symposia and workshops with the mission to bring together researchers, developers, users, and practitioners carrying out research and development in novel systems based on geo-spatial data and knowledge. The symposium fosters interdisciplinary discussions and research in all aspects of Geographic Information Systems and Science (GIS) and 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 is the first time that the conference is being held under the auspices of the new ACM Special Interest Group on Spatial Information (SIGSPATIAL). This year, in addition to the regular research paper track, we introduced two new conference tracks, namely a demonstration track and a Ph.D. showcase track. A program committee of 93 members reviewed the submissions.

The call for papers led to 232 paper submissions over all three tracks. The research paper track attracted 193 research paper submissions, of which 38 were accepted as full papers and another 37 papers were accepted as poster papers. The Ph.D. Showcase track attracted 19 Ph.D. showcase submissions, of which 8 were accepted, while the demonstrations track attracted 20 demonstration paper submissions, of which 13 were accepted. These numbers indicate the continued health, interest, and growth of the research field of geographic information systems, and the need to bring its researchers, students, and industrial practitioners together.

This year's program features two outstanding invited speakers:

- Vinton Cerf, VP of Google, USA and 2004 ACM Turing Award Winner
- Jack Dangermond, Founder and President of ESRI, USA

as well as a pre-conference workshop (SPRINGL 2008) on the topic of "Security and Privacy in GIS and LBS".

We would like to thank all the authors for submitting their work for consideration for publication, the members of the program committee for assessing the technical quality, originality, and relevance of these submissions, and the external reviewers for providing their expertise. Our special thanks go to the excellent teamwork of the entire organization committee that had to build up a complete conference infrastructure from scratch. Finally, we would like to thank our generous sponsors ESRI, Microsoft, Oak Ridge National Laboratory (ORNL), and Google who demonstrated what a successful cooperation between academia and industry can look like.

Finally, we hope that you will find this program interesting and thought-provoking and that the conference will be a valuable forum to share ideas with other researchers and practitioners from institutions around the world.

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