

# BigSpatial 2015

Proceedings of the 4<sup>th</sup> ACM SIGSPATIAL International Workshop on

Analytics for Big Geospatial Data

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Editor(s):

Varun Chandola, State University of New York at Buffalo, NY, USA

Ranga Raju Vatsavai, North Carolina State University, NC, USA

**The Association for Computing Machinery, Inc.  
2 Penn Plaza, Suite 701  
New York, NY 10121-0701**

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## FOREWORD

Big data is emerging as an important area of research for data researchers and scientists. This area has also seen significant interest from the industry and federal agencies alike, as evidenced by the recent White House initiative on "Big data research and development". Within the realm of big data, spatial and spatio-temporal data is one of the fastest growing types of data. With advances in remote sensors, sensor networks, and the proliferation of location sensing devices in daily life activities and common business practices, the generation of disparate, dynamic, and geographically distributed spatiotemporal data has exploded in recent years. In addition, significant progress in ground, air- and space-borne sensor technologies has led to an unprecedented access to earth science data for scientists from different disciplines, interested in studying the complementary nature of different parameters. Today, analyzing this data poses a massive challenge to researchers.

The first three editions of the workshop on **Analytics for Big Geospatial Data** (BIGSPATIAL 2012, BIGSPATIAL 2013, and BIGSPATIAL 2015) were highly successful in bringing together researchers working in this area for a program consisting of several invited and technical talks. The 4<sup>th</sup> workshop on **Analytics for Big Geospatial Data** (BIGSPATIAL 2015) builds on the success of the previous editions to bring together researchers from academia, government and industrial research labs that are working in the area of spatial analytics with an eye towards massive data sizes. The main motivation for this workshop stems from the increasing need for a forum to exchange ideas and recent research results, and to facilitate collaboration and dialog between academia, government, and industrial stakeholders. We hope that this workshop provides a platform for researchers and practitioners engaged in addressing the big data aspect of spatial and spatio-temporal data analytics to present and discuss their ideas.

This year we received 13 technical submissions out of which 6 were selected for full presentations. The technical program also consists of two invited talks from well-known experts from academia and government. BIGSPATIAL workshop will continue to provide a leading international forum for researchers, developers, and practitioners in the field of data analytics for big geospatial data to identify current and future areas of research.

Varun Chandola, State University of New York at Buffalo, NY, USA

Ranga Raju Vatsavai, North Carolina State University, NC, USA

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## ORGANIZERS

### GENERAL CHAIRS:

**Varun Chandola**, State University of New York at Buffalo, NY, USA.

**Ranga Raju Vatsavai**, North Carolina State University, NC, USA.

### PUBLICATIONS COORDINATOR:

**Suchismit Mahapatra**, State University of New York at Buffalo, NY, USA.

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