

The SIGSPATIAL Special

The SIGSPATIAL Special is the newsletter of the Association for Computing Machinery (ACM) Special Interest Group on Spatial Information (SIGSPATIAL).

ACM SIGSPATIAL addresses issues related to the acquisition, management, and processing of spatially-related information with a focus on algorithmic, geometric, and visual considerations. The scope includes, but is not limited to, geographic information systems.

Current Elected ACM SIGSPATIAL officers are:

- Chair, Mohamed Mokbel, University of Minnesota
- Past Chair, Walid G. Aref, Purdue University
- Vice-Chair, Shawn Newsam, University of California at Merced
- Secretary, Roger Zimmermann, National University of Singapore
- Treasurer, Egemen Tanin, University of Melbourne

Current Appointed ACM SIGSPATIAL officers are:

- Newsletter Editor, Chi-Yin Chow (Ted), City University of Hong Kong
- Webmaster, Ibrahim Sabek, University of Minnesota

For more details and membership information for ACM SIGSPATIAL as well as for accessing the newsletters please visit <http://www.sigspatial.org>.

The SIGSPATIAL Special serves the community by publishing short contributions such as SIGSPATIAL conferences' highlights, calls and announcements for conferences and journals that are of interest to the community, as well as short technical notes on current topics. The newsletter has three issues every year, i.e., March, July, and November. For more detailed information regarding the newsletter or suggestions please contact the editor via email at chiychow@cityu.edu.hk.

Notice to contributing authors to The SIGSPATIAL Special: By submitting your article for distribution in this publication, you hereby grant to ACM the following non-exclusive, perpetual, worldwide rights:

- to publish in print on condition of acceptance by the editor,
- to digitize and post your article in the electronic version of this publication,
- to include the article in the ACM Digital Library,
- to allow users to copy and distribute the article for noncommercial, educational or research purposes.

However, as a contributing author, you retain copyright to your article and ACM will make every effort to refer requests for commercial use directly to you.

Notice to the readers: Opinions expressed in articles and letters are those of the author(s) and do not necessarily express the opinions of the ACM, SIGSPATIAL or the newsletter.

The SIGSPATIAL Special (ISSN 1946-7729) Volume 9, Number 2, July 2017.

Table of Contents

	Page
Message from the Editor	1
<i>Chi-Yin Chow</i>	
 <u>Section 1: Special Issue on Indoor Spatial Awareness (Part 2)</u>	
Introduction to this Special Issue: Indoor Spatial Awareness (Part 2)	2
<i>Chi-Yin Chow</i>	
The Anatomy of the Anyplace Indoor Navigation Service	3
<i>Demetrios Zeinalipour-Yazti and Christos Laoudias</i>	
Risk Detection and Prediction from Indoor Tracking Data	11
<i>Tanvir Ahmed, Toon Calders, Hua Lu, and Torben Bach Pedersen</i>	
Toward Mining User Movement Behaviors in Indoor Environments	19
<i>Shan-Yun Teng, Wei-Shinn Ku, and Kun-Ta Chuang</i>	
Using Integrity Constraints to Guide the Interpretation of RFID-Trajectory Data	28
<i>Bettina Fazzinga, Sergio Flesca, Filippo Furfaro, and Francesco Parisi</i>	
Towards Ubiquitous Indoor Spatial Awareness on a Worldwide Scale	36
<i>Moustafa Elhamshary and Moustafa Youssef</i>	
 <u>Section 2: Event Report</u>	
ACM SIGSPATIAL GIR 2016 Workshop Report	44
<i>Christopher B. Jones and Ross S. Purves</i>	