

The Second International Symposium on Spatiotemporal Computing

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Spatiotemporal computing, the computing paradigm that utilizes spatiotemporal principles to devise cutting-edge computing technologies and solutions, enables the development of trailblazing new methodologies, tools and software to address global challenges such as climate change, natural disaster, or infectious disease. Following the successful first International Symposium on Spatiotemporal Computing held in July 2015 (ISSC'2015) at George Mason University, Fairfax, VA, the second International Symposium on Spatiotemporal Computing was held August 5-7, 2017 (ISSC'2017) at Harvard University, Cambridge, MA. ISSC'2017 aimed to further academic exchange on new findings, achievements and breakthroughs in spatiotemporal computing by bringing together people with different backgrounds and expertise who are engaged in the development and application of spatiotemporal computing and related topics. Call for papers focused on a) Exploring spatiotemporal principles and developing formal representations for spatiotemporal patterns from current research in computing, geospatial, and social sciences among other academic fields; b) Combining spatiotemporal patterns and modern computational technologies to foster next generation computing infrastructure to enable big data discovery, access, and processing; c) developing new spatiotemporal computing tools and software to improve our capability on urgent events responding.

Approximately 80 attendees from 5 countries participated in the three-day events. Among 60 submissions 29 papers were selected for final publication with three withdrawn for various reasons. The symposium was organized in four categories of sessions: a) four keynotes were invited from three countries to talk about topics of earth observation, social media, spatiotemporal visual analytics, and maps in political sciences; b) four mini-panels were organized following the keynotes to discuss relevant topics addressed in the keynotes with keynote speakers and three other field leaders; c) three breakout paper tracks with 11 sessions were organized on topics of theories, computing, and applications of spatiotemporal computing. A total of 45 oral and poster presentations were presented in the first two days; d) the last half day was organized to discuss the spatiotemporal computing field's history, status, and future research needs.

As reflected by the symposium, interest in the spatiotemporal computing field continues to grow with more in-depth research coming out, dealing with local to global challenges, including big spatiotemporal data, global earth observation, public health, disaster management, smart cities, and other initiatives. For example, the poster session attracted over 10 live demo presentations about latest software and tools developed.

We would like to thank committee members as denoted below for helping promote, review, and organize the symposium. Thanks also go to ISRPSS leadership, especially Christian Heipke and Lena Halounova, Sisi Zlatanova of TC IV for helping with the publication process.

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