Computing in Civil Engineering 2019

Data, Sensing, and Analytics

Selected Papers from the ASCE International Conference on Computing in Civil Engineering 2019

- Atlanta, GA
- June 17–19, 2019

Edited by Yong K. Cho, Ph.D.; Fernanda Leite, Ph.D.; Amir Behzadan, Ph.D.; and Chao Wang, Ph.D.

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DATA, SENSING, AND ANALYTICS

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June 17–19, 2019
Atlanta, Georgia

SPONSORED BY
Computing Division of the
American Society of Civil Engineers

EDITED BY
Yong K. Cho, Ph.D.
Fernanda Leite, Ph.D.
Amir Behzadan, Ph.D.
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Preface

The ASCE International Conference on Computing in Civil Engineering (i3CE) 2019 was hosted by the Georgia Institute of Technology with sponsorship from ASCE's Computing Division and held in the city of Atlanta, Georgia from June 17-19, 2019. The conference is the Computing Division's major meeting event and is held bi-annually in the United States, with participation from scholars worldwide. i3CE 2019 is aimed at presenting current research being carried out in the area of computing in civil engineering by attracting a strong and active researchers and audience through keynote sections, dedicated topic sessions, industry sessions, and technical committee meetings.

The 2019 Conference, as a standalone event, received 454 abstracts, 288 full papers, and 58 extended abstracts for the poster and demonstration sessions. A total of 230 full papers from 26 countries around the globe were accepted and included in the proceedings. The final set of papers was selected through a rigorous peer-review process, which involved the collection of at least two blinded reviews per paper. The review process was performed for both abstracts and full papers, ensuring that only the best contributions were selected. Finally, the authors had the chance to incorporate reviewers' comments into the final version. We are very pleased with the high quality of selected papers, and we wish to thanks both authors and reviewers for their efforts. All papers were divided into three books with the following three research focus areas:

- Visualization, Information Modeling, and Simulation
- Data, Sensing, and Analytics
- Smart Cities, Sustainability, and Resilience

Organizing this conference has been possible only with the support of many. We are particularly grateful to the School of Civil and Environmental Engineering at the Georgia Institute of Technology for their support and infrastructure. We would also like to thank the guidance from the Computing Division's Executive Committee and the assistance from ASCE.

We hope that you enjoyed the technical sessions, posters, demonstrations, technical committee meetings, and industry panel discussion during the conference and that you had a memorable and meaningful i3CE 2019 experience in Atlanta, Georgia.

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Acknowledgments

The members of the Organizing Committee are recognized for their dedication, support, and contributions for the success of the 2019 ASCE International Conference on Computing in Civil Engineering.

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Special thanks are due to the following Poster Session Chair, Demo Session Chair, Best Paper Award Committee Chair, and Student Assistants for their help with the related process.

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