

Computing in Civil Engineering 2017

Information Modeling and Data Analytics



Selected Papers from the ASCE International
Workshop on Computing in Civil Engineering 2017

- ▶ Seattle, Washington
- ▶ June 25–27, 2017

Edited by Ken-Yu Lin, Ph.D.; Nora El-Gohary, Ph.D.;
and Pingbo Tang, Ph.D., P.E.



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INFORMATION MODELING AND DATA ANALYTICS

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WORKSHOP ON COMPUTING IN CIVIL ENGINEERING 2017

June 25–27, 2017
Seattle, Washington

SPONSORED BY
Computing and Information Technology Division
of the American Society of Civil Engineers

EDITED BY
Ken-Yu Lin, Ph.D.
Nora El-Gohary, Ph.D.
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Preface

Welcome to Seattle, the Emerald City in Washington!

The 2017 ASCE International Workshop on Computing in Civil Engineering (IWCCE) was held in Seattle from June 25-27, 2017. The workshop was hosted by the University of Washington with sponsorship from ASCE's Computing Division. The workshop is the Computing Division's major meeting event and is held bi-annually in the United States, with participation from scholars worldwide.

The workshop has a long history of success and serves as a platform for sharing research innovation as well as valuable lessons. We introduced several pioneering changes this year, including the inaugural all-stakeholder meeting for the Computing Division. We had a strong and engaged Technical Committee which provided rigorous reviews for the abstracts and full papers, with each submission being reviewed by at least two members of our Technical Committee.

The 2017 workshop, as a standalone event, received more than 300 abstracts, 184 full papers, and 32 extended abstracts for the poster and demonstration sessions. The participation from our growing community has set a record and a total of 162 full papers were accepted and included in the proceedings. Among these papers, Building Information Modeling and Civil Information Modeling formed the most popular technical interests while Energy, Sustainability and Resilience topped the list of application contexts.

We would like to thank the Department of Construction Management at The University of Washington for its support of the workshop. We are also grateful for the guidance from the Computing Division's Executive Committee and the assistance from ASCE.

We hope that you enjoyed the technical sessions at the workshop and had a memorable and meaningful IWCCE experience in Seattle this year.

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| Name | Title |
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| Zhenyu Zhang | IWCCE Secretary |

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