

# Computing in Civil Engineering



Proceedings of the 2011 ASCE International  
Workshop on Computing in Civil Engineering

Edited by Yimin Zhu, Ph.D., and R. Raymond Issa, Ph.D., J.D., P.E.



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# COMPUTING IN CIVIL ENGINEERING

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PROCEEDINGS OF THE 2011 ASCE INTERNATIONAL  
WORKSHOP ON COMPUTING IN CIVIL ENGINEERING

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# Preface

Welcome to Miami! It is our pleasure to organize the 2011 International Workshop on Computing in Civil Engineering.

This year, we have received many high quality papers. The workshop has accepted over 100 papers from 19 countries in four subjects, 1) novel engineering, construction and management technologies, 2) design, engineering and analysis, 3) sustainable and resilient infrastructure, and 4) cutting edge development. These papers are the result of a rigorous peer review process starting from over 200 abstracts we received. Each abstract and paper was assigned to at least two reviewers. Only the outstanding papers have been collected in the proceedings. These papers are also a genuine representation of the very best research being conducted in this community.

We would like to thank the Department of Construction Management at Florida International University, the Rinker School of building Construction at University of Florida, and the External Program of the College of Engineering and Computing at Florida International University for their support. The buildingSmart Alliance and Autodesk have generously sponsored the workshop. The ASCE Technical Council on Computing and Information Technology committees have provided guidance and assistance to make the workshop a success. In particular, we would like to thank many members of the Visualization, Information Modeling and Simulation (VIMS) committee, the Data Sensing and Analysis (DSA) committee and the Education committee for their contribution to the paper review and selection process. Also, many thanks go to Mr. Victor Ceron for his hard work to serve as the secretary of the workshop.

Enjoy your stay in Miami! Don't miss the beach and the sunshine!

Yimin Zhu, Ph.D. and Raymond Issa, Ph.D., P.E., J.D., FASCE  
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2011 ASCE International Workshop on Computing in Civil Engineering

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