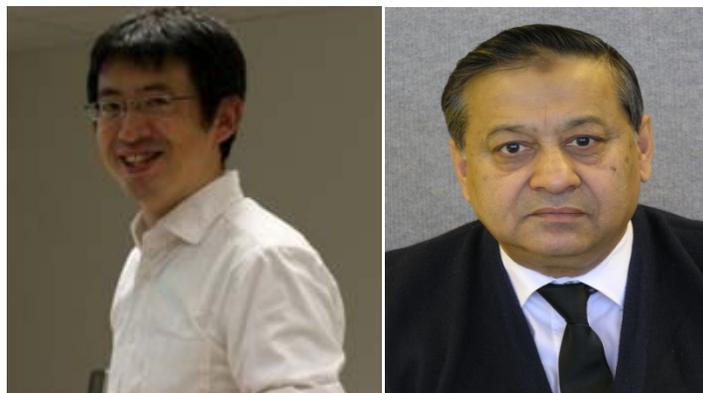


Message from the APWC on CSE/APWCE 2016 General Chairs



It gives us great pleasure to introduce this collection of papers to be presented at the Asia-Pacific World Congress on Computer Science and Engineering 2016 (APWC on CSE 2016)/Asia-Pacific World Congress on Engineering 2016 (APWCE 2016), which takes place in one of the most attractive settings in the natural world, Denarau Island, Fiji, from December 4–6, 2016. It has been a real honor and privilege to serve as the General Chair of this important academic event in the South Pacific region. We welcome all honorable and distinguished guest, authors, researchers, keynote speakers, and the members of the conference organization team to Sofitel Fiji Resort & Spa, Denarau Island, Fiji.

Classroom to office, home to hospital, workplace to shopping—everywhere modern technologies are playing a significant role in our daily lives. We have to use technologies in an innovative manner and it is also an important task for all of us. I am very confident that APWC on CSE/APWCE 2016 will be able to provide the latest research messages on modern information technology and engineering over the week in the South Pacific region.

The conference would not have been possible without the enthusiastic and hard work of a number of colleagues. We would like to express our appreciation to the Conference General Co-Chairs, Professor A B M Shawkat Ali, The University of Fiji, Fiji; A/Professor MGM Khan, The University of The South Pacific, Fiji; Professor Dongsoo Har, Korea Advanced Institute of Science and Technology, Republic of Korea; and Dr. Mohammed Arif Khan, Fiji National University, Fiji, for their valuable contributions in assembling the high-quality conference program. We also thank the Publication and Publicity Chairs, Professor Seung-Hyun Kong, Korea Advanced Institute of Science and Technology, Republic of Korea; Dr. Kabir Mamun, The University of The South Pacific, Fiji; and Dr. Shah Miah, Victoria University, Australia; Local Arrangements Chairs Dr. Mansour Assaf and Dr. F M Rabiul Islam, The University of The South Pacific, Fiji, and the individual track chairs. A conference of this size relies on the contributions of many volunteers and coordinators and we would like to acknowledge the efforts

of our TPC members and reviewers and their invaluable help in the review process. About 95% of the submissions were from outside the Fiji area. According to the IEEE policy, each submitted paper was peer-reviewed by at least two experts in the field for originality, significance, clarity, impact, and soundness. To maintain the quality research contribution, a member of the conference program committee monitored the blinded peer review process and was also charged with making the final decision for the proceedings. The overall paper acceptance rate for regular full papers was 30%. We are also grateful to all the authors who trusted the conference with their work.

Special thanks to the Keynote Speakers, Professor Kyung-Soo Kim, Korea Advanced Institute of Science and Technology, Republic of Korea; Professor Shizhang Qiao, The University of Adelaide, Australia; Professor Katoh Naoki, Kwansai Gakuin University, Japan; and Professor Feng Xia, Dalian University of Technology, China, and all the panelists for sharing their views on current research topics. We appreciate the support of our sponsors, the IEEE Computer Society, The University of Fiji, Korea Advanced Institute of Science and Technology, Academy Publisher, and i-Lab Australia. Finally, we would like to thank the Sofitel Fiji Resort & Spa, Denarau Island, authority for their support and hospitality.

We look forward to an exciting week of insightful research presentations, discussions, and sharing of technical ideas with colleagues from around the world. We thank you for attending the conference and we hope that you enjoy your visit to the Sofitel Fiji Resort & Spa, Denarau Island, Fiji.

We present the proceedings of APWC on CSE/APWCE 2016.

Professor Katsutoshi Yada, Kansai University, Japan
Professor Akhtar Kalam, Victoria University, Australia
APWC on CSE/APWCE 2016 General Chairs