

**Welcome to the Annual International Conference on Computing, Networking and Communications (ICNC 2012), January 30 - February 2, 2012, Maui, Hawaii, USA**



Dr. Vahid Tarokh

Dr. Kia Makki

General Chairs, ICNC 2012

On behalf of the International Conference on Computing, Networking and Communications (ICNC 2012) Executive Committee, we are pleased to welcome you to the International Conference on Computing, Networking and Communications (ICNC 2012) and beautiful Maui, Hawaii. It has been a real honor and privilege to serve as the General Chairs of this conference. ICNC has brought together a tremendous and rich diversity of authors and speakers from universities, government and industry around the globe to share ideas and new perspectives on a wide range of communications and networking research and technologies. Addressing new technical and business issues essential to advancing today's engineering and technological environments. The popularity of ICNC as the premier forum for communications and networking research has started to grow.

The ICNC has already become a prominent forum, where researchers and practitioners openly exchange ideas and report progress in the exciting area of communications and networking. This year, ICNC will deliver a stimulating, informative and delightful program. Recent advances in wired and wireless communications and networking technologies have created unprecedented new possibilities, across the spectrum of human endeavors, and will continue to offer great opportunities for economic growth and social prosperity. As our reliance on communication and networking systems continues to grow, so is our need to deal with a host of issues and challenges, some of which were known and became critical as these systems evolved and others arose recently as a result of the increase in their scale, heterogeneity and complexity. The ICNC conference focuses on a broad range of these issues and challenges and weaves them through the Keynotes Speakers, Distinguished Lecturers, Invited Talks, Workshops, and Technical Program.

This year, the response to the conference's call for papers has been outstanding, and we expect that the attendance will be equally impressive. Many individuals and organizations contributed to the success of this conference. We would like to acknowledge the

tremendous efforts of the Executive Chair, Haohong Wang (TCL Research America), who has to be commended for his hard work and commitment. His substantive competence and tireless dedication to this conference are unparalleled. Haohong Wang together with the Technical Program Co-Chairs, Guoliang Xue (Arizona State University) and Mukesh Singhal (University of Kentucky), the TPC Co-Chairs, Hung Nguyen (Aerospace), Ahmed E. Kamal (Iowa State University), and Bin Wei (AT&T Labs Research), Symposium Chairs, the Workshops Co-Chairs, Jun Zheng (Southeast University, China) and Tommaso Melodia (State University of New York at Buffalo), Tutorial Chairs, John Thompson (University of Edinburgh, UK) and Khaled El-Maleh (Qualcomm), Invited paper Chairs, Tomohike Tamiguchi (Fujitsu, Japan) and Andres Kwasinski (RIT), who have assembled a truly impressive Technical Committee.

Together with the Technical Program Committee, they worked diligently to select papers and speakers that met the criteria of high quality and relevance to our various fields of interest. We are grateful for all their hard work and efforts. It takes time and efforts to review a paper carefully, and every member of the Technical Program Committee is to be commended for his or her contribution to the success of this conference.

The Technical Program Co-Chairs, the TPC Co-Chairs, Symposium Chairs and the Workshops Co-Chairs had the unenviable task of coordinating the peer review process and putting together an outstanding technical program. They deserve a lot of thanks. The success of this conference would not have been possible without the dedication and efforts of the members of the Executive and the Organizing Committees.

We would like to extend our appreciation to the Student Travel Grant Chairs, Xinbing Wang (Shanghai Jiao Tong University, China) and Kami Makki (Lamar University), Publicity Chairs, Liang Zhou (Munich University of Technology, Germany), Lei Shu (Osaka University, Japan), Jiang Zhu (Cisco), Shui Yu (Deakin University, Australia), Shamila Makki (Horizon Electronics) and Masoumeh Karimi (Communications Technology), Local Arrangement Chair, Jung Won Park (University of Hawaii), Publication Chair, Song Ci (University of Nebraska-Lincoln), Conference Operations Chairs, Senad Busovaca (California State University, Sacramento), E. K. Park (City University of New York) and Kami Makki (Lamar University), International Chairs, Irene Cheng (University of Alberta, Canada), Dacheng Tao (University of Technology Sydney, Australia), and Tingkai Wang (London Metropolitan University, UK) for their incredibly hard work organizing an excellent conference.

Special thanks to our keynote speakers, Weihua Zhuang (IEEE/CAE Fellow, University of Waterloo, Canada), Renato Recio (IBM Fellow, CTO, System Networking, IBM, USA) and Muriel Medard (IEEE Fellow, Professor MIT). We greatly value their participations and look forward to their insightful vision and thoughts. Thanks also go to the Distinguished lecturers, Invited Talks and participants. I would like to extend my most sincere congratulations to the authors and speakers for a job well done. It is their efforts and vision which provided the impetus to put together this outstanding technical program. The excellence and success of ICNC would not have been possible without the support of our sponsors the IEEE, IEEE Communications Society and Qualcomm. We greatly appreciated all our sponsors.

It was our great honor and pleasure to accept the responsibilities and challenges of Conference General Chairs. We hope that the conference will be stimulating, informative, enjoyable and fulfilling experience to all who attend it.

**Vahid Tarokh, Harvard University, USA**  
**General Chair, ICNC 2012**

**Kia Makki, Technological University of America (TUA), USA**  
**General Chair, ICNC 2012**