



Signal Processing for Communications Symposium

Symposium Co-Chairs

Hai Lin, Osaka Prefecture University, Japan

Email: hai.lin@ieee.org

Octavia Dobre, Memorial University, Canada

Email: odobre@mun.ca

Said Boussakta, University of Newcastle upon Tyne, UK

Email: said.boussakta@ncl.ac.uk

Scope and Topics of Interest

Nowadays, the low-cost light-weight transceivers are facilitated on the real-time powerful digital signal processing platforms. The advanced signal processing techniques help communication systems progress into a new era. More and more signal processing modules are designed to provide novel solutions to new communication standards and technologies. The Signal Processing for Communications Symposium welcomes papers dealing with the algorithmic and implementation aspects within the topics listed below. Of special interest are the design of new algorithms and schemes for communication systems, as well as performance analysis and practical implementation. The emerging issues which are addressed in this symposium include, but are not limited to estimation and detection, low-power and low-complexity signal processing, cross-layer optimization for signal quality enhancement, advanced beamforming, jointly optimal solutions for modulation, coding, synchronization and detection, channel modeling and its effects for transmitter/receiver adaptation, and spectrum sensing and awareness. Especially, the state-of-the-art signal processing methodologies, theories and practices in the prevalent communication standards in 3G/4G, LTE/LTE-A, WLAN, WMAN, WiMAX, UWB, are of great interest.

To ensure complete coverage of the advances in signal processing for communications, the Signal Processing for Communications Symposium presents original contributions in, but not limited to, the following topical areas:

- Adaptive Antennas and Beamforming
- SIMO, MISO, MIMO Systems
- Channel Estimation, Equalization and Modeling
- OFDM and Multi-carrier Systems
- Signal Processing Techniques in CDMA or WCDMA
- Multi-user Systems
- Space-Time Processing and Decoding
- Signal Detection and Synchronization
- Software Defined and Cognitive Radio
- Modulation and Coding Techniques
- Blind Signal Processing for Communications
- Signal Processing for Security and Cryptography
- VLSI/ASIC/FPGA Circuits and Systems for Communications
- Transmitter and Receiver Techniques
- Spectrum Sensing and Awareness
- Signal Processing in LTE/LTE-A and Other Emerging Systems
- Compressive Sensing and Compressive Sampling
- Fast Transforms and Algorithms for Communications
- Localization and Positioning Techniques
- Speech, Image and Video Signal Processing

Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline 16 September 2012 for publication in the IEEE ICC 2013 Conference Proceedings and for oral or poster presentation(s).

All submissions should be written in English with a maximum paper length of Five (5) printed pages (10- point font) including figures without incurring additional page charges (maximum 1 additional page with over length page charge if accepted).

Standard IEEE Transactions templates for Microsoft Word or LaTeX formats found at
<http://www.ieee.org/portal/pages/pubs/transactions/stylesheets.html>

Alternatively you can follow the sample instructions in template.pdf at
<http://www.comsoc.org/confs/globecom/2008/downloads/template.pdf>

Only PDF files will be accepted for the review process and all submissions must be done through EDAS at
<http://edas.info/>

Short Biography of Co-Chairs

Dr. Hai Lin received his B.E. degree from Shanghai JiaoTong University, China, in 1993, the M.E. degree from University of the Ryukyus, Japan, in 2000, and the Dr. Eng. degree from Osaka Prefecture University, Japan, in 2005. Since 2000, he was a research associate in the Graduate School of Engineering, Osaka Prefecture University, where now he is an associate professor. His research interests are in general area of signal processing for communication systems. Dr. Lin has acted many times as session chair and technical program committee member for IEEE ICC, GLOBECOM, WCNC, VTC, and PIMRC. He has served as Technical Program Co-Chair for the Wireless Communication Systems Symposium of the WCNIS 2010, the Wireless Communications Symposium of the ICC 2011, and the Signal Processing for Communications Symposium of the ICNC 2012. Currently, he is serving as an Editor of the IEEE Transactions on Wireless Communications, and an Associate Editor of the IEEE Transactions on Vehicular Technology. Dr. Lin is a member of the IEEE and the IEICE.

Dr. Octavia A. Dobre received the Dipl. Ing. and Ph. D. degrees from Politehnica University of Bucharest (formerly the Polytechnic Institute of Bucharest), Romania, in 1991 and 2000, respectively. In 2000 she was the recipient of a fellowship at Westminster University, UK, and in 2001 she held a Fulbright fellowship at Stevens Institute of Technology, USA. Between 2002 and 2005, she was a Research Associate with New Jersey Institute of Technology, USA. In 2005 she joined Memorial University, Canada, where she is currently an Associate Professor. Her research interests include cognitive radio systems, spectrum sensing techniques, blind signal recognition and parameter estimation techniques, transceiver optimization algorithms, dynamic spectrum access, cooperative wireless communications, network coding, and resource allocation. Dr. Dobre has published more than 100 papers in various journals and conference proceedings. She is an Editor for the IEEE Communications Letters and IEEE Communications Surveys and Tutorials, and has served as a Guest Editor for the IEEE Journal of Selected Topics in Signal Processing, and Technical Program Co-Chair for the Signal Processing and Multimedia Symposium of the IEEE CCECE 2009 and Signal Processing for Communications Symposium of the ICNC 2012.

Prof. Said Boussakta received the "Ingenieur d'Etat degree in Electronic Engineering from the Ecole National Polytechnic of Algiers (ENPA), Algeria in 1985 and the PhD degree in Electrical Engineering from the University of Newcastle upon Tyne, U.K., in 1990. From 1990-2000, he was with the University of Newcastle upon Tyne as Senior Research Associate in digital signal and image processing. From 1996-2000, he was with the University of Teesside, Teesside, UK. as a Senior Lecturer in communication Engineering. From 2000-2006 he was at the University of Leeds as Reader in digital communications and signal processing. He is currently a Professor of communications and signal processing at the School of Electrical and Electronic Engineering, Newcastle University, U.K., where he is lecturing in communications networks and signal processing subjects. His research interests are in the areas of fast DSP algorithms, digital communications, communications networks systems, cryptography, digital signal/image processing. He has authored and co-authored more than 200 publications. Prof. Boussakta is a Fellow of the IEE, and a Senior Member of the Communications and Signal Processing Societies.