Call for Papers for
Signal Processing for Communications Symposium

Scope and Motivation:

Advanced signal processing plays a key role in the development of modern communication technology. More and more signal processing algorithms are designed and modules developed to provide novel solutions to current and emerging communication systems. Considering the diverse and fast-growing nature of research in this field, we solicit original contributions in all relevant aspects of signal processing for communications and networking, including design, analysis, implementation, and application.

Main Topics of Interest:

The issues addressed in this symposium are broad, ranging from traditional transceiver design, to cross-layer optimization, state-of-the-art signal processing methodologies in prevalent and emerging communication systems, and application to new frontiers including cognitive radio and smart grid. Our intention is to provide a comprehensive coverage of recent advances in signal processing for current and next-generation communication systems and networks. Topics of interest include, but are not limited to:

- Channel estimation
- Equalization
- Synchronization and signal detection
- Novel architectures for demodulation and decoding
- Signal processing for OFDM and OFDMA systems
- Signal processing for spread-spectrum and CDMA systems
- Signal processing for ultra-wideband and impulse radio
- Signal processing techniques for commercial/standardized systems (LTE, LTE/A, WiMAX), ,multi-antenna (SIMO, MISO, MIMO) and multi-user systems
- Adaptive antennas and beamforming
- Distributed, decentralized, and cooperative signal processing in networked systems
- Compressive sensing algorithms

- Localization and positioning techniques
- Signal processing for sensor networks
- Signal processing for cognitive radio
- Signal processing for green communications
- Signal processing for smart grid and powerline communications
- Signal processing for security and cryptography
- VLSI/ASIC/FPGA circuits and systems for communications
- Speech, image and video signal processing
- Signal processing for big data

Sponsoring Technical Committees:

- Signal Processing & Communications Electronics
- Wireless Communications

How to Submit a Paper:

The IEEE Globecom 2014 website provides full instructions on how to submit papers. You will select the desired symposium when submitting. **The paper submission deadline is April 1, 2014. Unlike recent ICC's and Globecom's, this is a hard deadline that will not be extended.**

Symposium Co-Chairs:

- Sofiène Affes, INRS, Canada, affes@emt.inrs.ca
- Feifei Gao, Tsinghua University, China, feifeigao@ieee.org
- Markku Juntti, University of Oulu, Finland, markku.juntti@ee.oulu.fi

Biographies:

Sofiène Affes (IEEE SM'04) received the Diplôme d'Ingénieur in telecommunications in 1992, and the Ph.D. degree with honors in signal processing in 1995, both from École Nationale Supérieure des Télécommunications (ENST), Paris, France. He has been since with INRS, Canada, as a Research Associate till 1997, an Assistant Professor till 2000, and Associate Professor till 2009. Currently he is Full Professor and Director of PERWADE, a unique 4M$ research training program on wireless in Canada involving 27 faculty from 8 universities and 10 industrial partners. Dr Affes has been twice the recipient of a Discovery Accelerator Supplement Award from NSERC, from 2008 to 2011, and from 2013 to 2016. From 2003 to 2013, he held a Canada Research

Chair in Wireless Communications. In 2006, he served as a General Co-Chair of IEEE VTC'2006-Fall, Montreal, Canada. In 2008 he received from the IEEE Vehicular Technology Society the IEEE VTC Chair Recognition Award for exemplary contributions to the success of IEEE VTC. He also received best paper awards at IEEE Globecom'2007, ICASSP'2008, and VTC'2010-Fall. He currently acts as an Associate Editor for three IEEE Transactions on Communications, Signal Processing, and Wireless Communications, and for *Wiley Journal on Wireless Communications & Mobile Computing*.

Feifei Gao (S'05, M'09) received the Ph.D. degree from National University of Singapore, Singapore, in 2007. He was a Research Fellow with the Institute for Infocomm Research, A*STAR, Singapore, in 2008 and was an Assistant Professor with the School of Engineering and Science, Jacobs University, Bremen, Germany, from 2009 to 2010. In 2011, he joined the Department of Automation, Tsinghua University, Beijing, China, where he is currently an Associate Professor. Prof. Gao's current research interests mainly reside in signal processing for communications, with specific attention on detection, estimation and convex optimization for array signal processing, wireless communications, and cognitive radio. He has authored and coauthored more than 50 refereed IEEE journal papers and 60 IEEE conference proceedings papers, which have been cited over 1400 times in Google Scholar. Prof. Gao is serving as an editor for IEEE Transactions on Wireless Communications, IEEE Wireless Communications Letters, and China Communications.

Markku Juntti received his M.Sc. (EE) and Dr.Sc. (EE) degrees from University of Oulu, Oulu, Finland in 1993 and 1997, respectively. He was with University of Oulu in 1992-98. In academic year 1994-95 he was a Visiting Scholar at Rice University, Houston, Texas. In 1999-2000 he was a Senior Specialist with Nokia Networks. Dr. Juntti has been a professor of communications engineering at University of Oulu, Department of Communication Engineering (DCE) and Centre for Wireless Communications (CWC) since 2000. His research interests include signal processing for wireless networks as well as communication and information theory. He is an Editor of IEEE Transactions on Communications.