

# Call for Papers

## Signal Processing for Communications Symposium (SPC)

ICNC 2019

Honolulu, Hawaii, USA, Feb 18-21, 2019

<http://www.conf-icnc.org/2019/>

### Symposium Co-chairs

Alex Dytso, Princeton University, USA, [adytso@princeton.edu](mailto:adytso@princeton.edu)

Feng Ye, University of Dayton, OH, USA, [fye001@udayton.edu](mailto:fye001@udayton.edu)

Kewi Sha, University of Houston-Clear Lake, [sha@uhcl.edu](mailto:sha@uhcl.edu)

### Scope

The focus of Signal Processing for Communications Symposium is on topics related to algorithmic, analytical, and implementation aspects within signal processing for communication systems. Of special interests are signal processing methodologies, theories, performance analysis and implementations of communication systems and applications to new frontiers including cognitive radio, smart grid and 5G communications. To ensure complete coverage of the advances in this field, the Signal Processing for Communications Symposium solicits original contributions in, but not limited to, the following topical areas:

- Channel modelling, estimation, and equalization
- Adaptive antennas and beamforming
- Space-time coding and processing
- Signal detection and synchronization
- Faster-than-Nyquist signaling
- Compressive sensing techniques
- Transmitter and receiver techniques
- Millimeter-wave communications
- Cognitive radio and software defined radio
- Modulation, coding, and diversity techniques
- Ultra-wideband (UWB) communications
- Underwater acoustic communications
- SISO, SIMO, MISO, MIMO, and Massive MIMO Systems
- Massive Random Access
- OFDM and multi-carrier systems
- CDMA, TDMA, FDMA, LTE
- Non-Orthogonal Multiple Access (NOMA)
- Speech, image and video signal processing
- Communications test-bed development
- Localization and position techniques
- Signal processing techniques for cooperative networks
- Signal processing techniques for green communications and energy harvesting.
- Signal processing techniques for power-line communications
- Signal processing techniques for security and cryptography
- Signal Processing Techniques for 5G communications and beyond
- Advanced signal processing modules for smart grid
- Resource allocation techniques, mathematical optimizations and game theory.

## Submission Guidelines

Please follow the author instructions at <http://www.conf-icnc.org/2019/author.htm>

Direct paper submission for this symposium can be found at <http://www.conf-icnc.org/2019/cfp.htm>

## Short Biography of Co-chairs:

**Alex Dytso** is currently a Postdoctoral Researcher in the Department of Electrical Engineering at Princeton University. In 2016, he received a Ph.D. degree from the Department of Electrical and Computer Engineering at the University of Illinois, Chicago. He received his B.S. degree in 2011 from the University of Illinois, Chicago, where he also received the International Engineering Consortium's William L. Everitt Student Award of Excellence for outstanding seniors. His current research interest are in the areas of multi-user information theory and estimation theory, and their applications in wireless networks.

**Dr. Feng Ye** is an Assistant Professor in the Department of Electrical and Computer Engineering, University of Dayton, Dayton, OH, USA. He received a Ph.D. degree from the University of Nebraska – Lincoln (UNL), Omaha, NE, USA, 2015 and a B.S. degree from Shanghai Jiao Tong University, Shanghai, China, 2011. Prior to joining UD, he was with the Department of ECE, UNL as an instructor and a researcher from 2015 to 2016. His research interests include, wireless communications and networks, cyber security and communication network security, green ICT, smart grid communications and energy optimization, big data analytics and applications. He serves as the secretary of the IEEE Technical Committee on Green Communications and Computing (TCGCC). He is currently an Associate Editor of Security and Privacy (Wiley), and China Communications. He serves as the Publicity Co-Chair of IEEE CBDCOM 2018; the Co-Chair of Cognitive Radio and Networking Symposium, IEEE ICC 2018. He also serves as a TPC member for numerous international conferences, including INFOCOM, Globecom, VTC, ICC, etc. He is also a reviewer for several IEEE journals, including IEEE Transactions on Big Data, IEEE Transactions on Green Communications and Networking, IEEE Transactions on Smart Grid, IEEE Transactions on Vehicular Technology, IEEE Transactions on Wireless Communications, etc. He is the recipient of the 2015 Top Reviewer of the IEEE Vehicular Technology Society.

**Dr. Kewei Sha** is an Associate Director of Cyber Security Institute and Assistant Professor of Computer Science at University of Houston - Clear Lake (UHCL). Before he moved to UHCL, he was the Department Chair and Associate Professor in the Department of Software Engineering at Oklahoma City University. He received Ph.D. in Computer Science from Wayne State University in 2008. His research interests include Internet of Things, Cyber-Physical Systems, Edge Computing, Network Security and Privacy, and Data Management and Analytics. His research has been supported by NSF and UHCL. Dr. Sha has served as the secretary of Technical Committee on the Internet of the IEEE Computer Society (IEEE-CS TCI), a guest Editor at several prestigious international journals, and an organizing committee member of many conferences, including the TPC Chair of IEEE ICCCN 2015, the workshop general chair of IEEE ICCCN 2013 and 2018. He is also a program committee member in numerous prestigious conferences. He is a reviewer for numerous top journals including IEEE TPDS, IEEE TC, IEEE TN, ACM TAAS, IEEE TDSC, IEEE TITS, IEEE TSC, IEEE TCC, IEEE TVT, etc. He is a Senior member of both ACM and IEEE. Dr. Sha is a recipient of 2018 Albert Nelson Marquis Lifetime Achievement Award and IEEE Outstanding Leadership Award in 2015.