CALL FOR PAPERS

**53rd Annual Asilomar Conference on Signals, Systems, and Computers**

­Asilomar Hotel and Conference Grounds

Pacific Grove, California

November 3 – 6, 2019

[www.asilomarssc.org](http://www.asilomarssc.org)

Authors are invited to submit papers in the following areas:

**A. Communications Systems**: 1. Modulation and Coding, 2. Cognitive Radios and Spectrum Sharing, 3. Ultra-Low Latency, 4. Optimization, 5. Physical Layer Security and Privacy, 6. mmWave, 7. Underwater, 8. Wireline and Optical Communications, 9. Satellite, 10. IoT, 11. V2V, 12. 5G and Beyond

**B. MIMO Communications and Signal Processing:** 1. Multiuser and Massive MIMO, 2. Channel Estimation and Equalization, 3. Full-Duplex, 4. Cooperation and Relaying, 5. Interference Management and Awareness, 6. mmWave, 7. Optimization

**C. Networks:** 1. Wireless Networks, 2. IoT, 3. Network Info Theory, 4. Optimization, 5. Graph Signal Processing, 6. Social Networks, 7. Distributed Algorithms, 8. Security, 9. Computational Offloading, 10. Self-Organizing Networks, 11. UAV and V2V Networks, 12. Smart Grid

**D. Adaptive Systems, Machine Learning, Data Analytics**: 1. Compressive Sensing, 2. Machine Learning, 3. Estimation, Inference and Learning, 4. Adaptive and Cognitive Systems, 5. Adaptive Filtering, 6. Fast and Scalable Algorithms, 7. High-Dimensional Large-Scale Data, 8. Distributed Computation and Storage, 9. Deep Learning

**E. Array Processing and Multisensor Systems**: 1. Source Localization and Separation, 2. Beamforming, 3. Robust Methods, 4. MIMO and Cognitive Radars, 5. Tensor Models and Processing, 6. Sparse Sensor Arrays, 7. Optimization, 8. Applications (Imaging, Radar, Sonar, Microphone Arrays)

**F. Biomedical Signal and Image Processing**: 1. Molecular and Medical Imaging, 2. Computational Imaging, 3. Neuroengineering, 4. Processing of Physiological Signals, 5. Bioinformatics and Computational Biology, 6. Image Registration and Multimodal Imaging, 7. Functional Imaging, 8. Brain Machine Interfaces, 9. Neural Signal Processing, 10. Visualization

**G. Architectures and Implementation**: 1. Energy Efficiency, 2. Accelerators, 3. Reconfigurable Processing, 4. Non-idealities, 5. Multicore, Many-core and Distributed Systems, 6. Algorithm and Architecture Co-optimization, 7. Architectures for Big Data, 8. Architectures for Machine Learning, 9. Cyber-Physical System, 10. Test-beds, 11. Mixed-Signal Processors, 12. Arithmetic and Algorithms

**H. Speech, Image and Video Processing**: 1. Speech Processing, 2. Speech Coding, 3. Speech Recognition, 4. Audio Coding, 5. Document Processing, 6. Models for Signal and Image Processing, 7. Image and Video Coding and Communication, 8. Learning and Autonomous Systems, 9. Computer Vision, Image and Video Analysis, 10. Image and Video Forensics, 12. Biometrics and Security, 13. Hybrid Imaging Systems

Submissions must include a 50–100 word abstract, an extended summary (500–1000 words plus figures), the title of the paper, each author's name and affiliation, technical area, and topic designation from the above list. The conference website ([www.asilomarssc.org](http://www.asilomarssc.org)) provides specific information on the electronic submission process. Submissions will be accepted starting February 1, 2019.

* **All submissions must be received by May 1st, 2019**.
* **No more than FOUR** **submissions** **are allowed** **per contributor, as author or co-author.**
* **To have a paper published, an author must register and present the paper at the conference.**

Notifications of acceptance will be mailed by mid-July 2019. Full papers are due shortly after the conference and published in early 2020. All technical questions should be directed to the Technical Program Chair **Prof. Christoph Studer** ([studer@cornell.edu](mailto:studer@cornell.edu)) or to the General Chair **Prof. Gerald Matz** ([gmatz@nt.tuwien.ac.at](mailto:gmatz@nt.tuwien.ac.at)). Prospective organizers of special sessions are invited to submit proposals to the General or Technical Chairby January 31, 2019. Proposals must include title, topic, rationale, session outline, contact information, and a description of the session organization.

# CONFERENCE COMMITTEE

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The site for the 2019 Conference is at the Asilomar Conference Grounds, in Pacific Grove, CA. The grounds border the Pacific Ocean and are close to Monterey, Carmel, and the scenic Seventeen Mile Drive in Pebble Beach.

The Conference is organized by the non-profit Signals, Systems and Computers Conference Corporation.