Preliminary CFP IEEE SECON 2021 - IEEE International Conference on Sensing, Communication and Networking

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Preliminary Call for Papers

18th IEEE International Conference on Sensing, Communication and Networking (IEEE SECON)


The 18th annual IEEE International Conference on Sensing, Communication and Networking (SECON) will provide a unique forum to exchange innovative research ideas, recent results, and share experiences among researchers and practitioners in wireless and mobile communication networks. The conference aims to serve as the reference exhibit for state-of-the-art research supported by implementation and insights gained on all scales of experimental systems, network architectures, components, and protocols.

Looking beyond current sensing, communication, and networking paradigms, IEEE SECON continues to emphasize pioneering cross-disciplinary work as its signature footprint in the contemporary research landscape. Towards that end, SECON encourages work that falls at the intersection of traditional sensing/networking and new disciplinary areas including (but not limited to) machine intelligence, data analytics, edge computing, social networks, rural connectivity, electromagnetic fields, to name a few, encompassing topics ranging from biological communication and computing networks to uncharted wireless bands, edge intelligence, social media data exploitation, mobile data analysis and beyond 5G networking/communications aspects.

Papers describing original, previously unpublished research, experimental efforts, practical experiences, as well as visionary roadmaps, in all aspects of sensor networks, Internet of Things, mobile devices, and wireless communication are solicited. Particular topics of interest include, but are not limited to:

- Machine intelligence for sensing, communication, and/or networking
- In-network processing/fog/edge computing in wireless networks
- Wearable computing and networking
- Cyber-physical systems and wireless control systems
- Security, privacy, and trustworthiness of mobile, wireless and sensor systems
- Unmanned aerial vehicle (UAV)-based sensing/communications/networking (low altitude platforms, high altitude platforms)
- Wireless and mobile sensing systems in challenging media (e.g., underground, underwater, space)
- Internet of Things, Nano-Things and Bio-Nano-Things
- New communication paradigms, such as Terahertz communications and optical wireless communications
- Intra-body networks and molecular communication networks
- Sensing and dissemination based on social media
- Beyond communications/networks (Terahertz communications, large intelligent surfaces, reconfigurable intelligent surfaces)
- Next-generation applications enabled via wireless, such as virtual/augmented reality, autonomous driving, smart cities - Networking/communications solutions to face the connectivity divide in rural and low-income areas
- Contact tracing, localization and sensing for combating the COVID-19 pandemic
- Radio-Frequency sensing to evaluate the exposure level from personal devices (e.g., smartphones)
- ElectroMagnetic Field measurement and evaluation in 5G and beyond
- Low-power and energy limited sensing and communications
- Measurement of wireless and sensor systems, and novel experimental testbeds
- Software-defined and programmable networks
- Cognitive radio and dynamic spectrum access
- Survivability and fault tolerance in disaster scenarios - Large scale analysis of mobile data
- Application protocols and cross-layer design
- Applications, platforms, and testing platforms for city-scale evaluation of new sensing systems
- Submission instructions are found in the authors page.

PRELIMINARY SCHEDULE

- Abstract Registration: February 8th, 2021
- Paper Submission: February 15th, 2021
- Acceptance Notification: April 17th, 2021
- Paper Final Version Due: April 30th, 2021

TPC CHAIRS

Luca Chiaraviglio (University of Rome Tor Vergata, Italy) Chenyang Lu (Washington University in St. Louis, USA) Kay Romer (TU Graz, Austria)

GENERAL CHAIRS

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