

IEEE International Conference on Sensing, Communication, and Networking

20–23 September 2022 // Virtual Conference



Call for Papers



The 19th 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 Papers describing original, previously unpublished research, experimental efforts, practical experiences, as well as visionary roadmaps, in all aspects of sensor networks, Internet of Things, mobile devices,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:

- New communication paradigms, such as Terahertz communications, optical wireless communications, visible light communication, acoustic communication, and uncharted wireless bands, reconfigurable intelligent surfaces
- New platforms, techniques, and hardware designs for sensing
- Cellular communications and data networks, including 5G and beyond
- Internet of Things, Nano-Things and Bio-Nano-Things; Cyber-Physical systems
- Software defined and programmable networks
- Intra-body networks and molecular communication networks
- Unmanned aerial vehicle (UAV)-based sensing/communications/networking
- Low-power & energy limited sensing and communications
- Communication and networking for AI and machine learning
- Data analytics, AI, and machine learning for sensing, communication, and networking
- Time and location management in networking systems
- Sensing, communication, and networking in challenging scenarios (e.g., underground, underwater, rural and low-income areas, COVID-19 pandemic, space)
- Sensing and networking of social systems
- Fairness and Socio-technical issues in networking
- Security, privacy, and trustworthiness of mobile, wireless and sensor systems
- Cloud, Edge, and Fog computing for sensing and inference
- Novel experimental testbeds for sensing and networking systems
- Measurement of sensing and networking systems
- Sensing and Networking for Smart & Connected Communities
- Deployment experiences in sensing, communication, and networking
- Next generation applications such as wearable computing, virtual/augmented reality, autonomous driving, industrial internet, and smart cities, agriculture, industry, energy, transportation, water, and other smart infrastructural systems

Selected accepted papers will be fast-tracked to ACM Transactions on Sensor Networks (TOSN) for publication.

Important Dates

- Abstract Registration: ~~2 May 2022~~ **9 May 2022**
- Paper Submission: ~~9 May 2022~~ **16 May 2022**
- Acceptance Notification: **15 July 2022**

Conference Website

- <https://secon2022.ieee-secon.org>

General Chair

- Viktoria Fodor (KTH Royal Institute of Technology, Sweden)

Technical Program Co-Chairs

- Yuan He (Tsinghua University, China)
- Simone Silvestri (University of Kentucky, USA)
- Ilenia Tinnirello (Università degli Studi di Palermo, Italy)