



Call for Papers

Selected Areas in Communications Symposium

Tactile Internet Track

Track chair

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Scope and Topics of Interest

The recent advances in computing and communications systems have led to anywhere anytime connectivity and support emerging Internet of Things (IoT) and cyber physical systems (CPS) applications. In these emerging systems, wireless communications will be used not only for content distribution but also for feedback with least latency and high reliability for dynamic adaption of the system. Some of the emerging IoT or CPS applications will demand an end-to-end latency of a few microseconds to milliseconds, while automation and control may require reliabilities with least delay. Thus, ultra-fast, ultra-high reliability and ultra-responsive network connectivity, are the requirements for Tactile Internet for remotely real-time control and tactile experience delivery. To meet these requirements including low latency and reliability, wireless system design requires a complete change in overall paradigm which must be reflected in all components such as signal processing, air interface design, end devices as well as network infrastructure and protocol stack design. The track provides a platform for technical experts from academia, government and industry for designing tactical Internet with low latency and high reliability that will significantly reduce end-to-end latency and/or increase reliability in emerging applications.

The SAC Symposium Tactile Internet track seeks original contributions in, but not limited to, the following topical areas:

- Framework and solutions to reduce end-to-end latency and/or offer higher reliability in Tactile Internet applications
- Communication architectures and protocols for Tactile Internet applications
- Radio resource management techniques
- Interface design
- Adaptive and secure waveform design
- Multi-point transmission and connectivity

- Advance protocol stack and session management
- Adaptive network infrastructure
- Cloud-RAN and wireless edge network
- Lightweight blockchain and sharding
- Ad-hoc networking, routing, switching
- Deployment, testbeds, demonstrations and standardization
- Context-aware computing
- Multi-service architectures and interworking
- (Secure) network coding
- Network edge intelligence
- Low latency and low power circuits
- Reconfigurable multi-standard systems
- Haptic codecs

Submission Guidelines

The IEEE ICC 2020 website (icc2020.ieee-icc.org) provides full instructions on manuscript format and how to submit a manuscript. You will select the desired symposium/track when submitting your manuscript.