

Communications Enabling Shared Understanding



Call for Papers

Selected Areas in Communications Symposium

E-Health Track

Track chair

Honggang Wang, University of Massachusetts Dartmouth, USA hwang1@umassd.edu

Scope and Topics of Interest

The e-Health track provides an opportunity to bring together researchers, scientists, healthcare professionals, policy makers, engineers, academics and students from all around the world to share their experience and latest advances and updates on new technologies and systems development in different healthcare and medicine applications. E-Health technologies offer new opportunities to transform the way we receive and provide healthcare services towards the digitalization of medicine. It enables new approaches to independent living, integrated health and social care. New solutions continue to be developed to create safer health care environments. The rapid growth of using such devices and technologies in medical fields has created new opportunities for emerging application development. Enormous challenges still remain to be resolved in order to develop optimized, flexible, reliable, secure, and power-efficient networks suitable for medical needs that can help accelerate scientific research, personalized and precision medicine, early and automatic diagnosis of diseases and more effective treatments with digital technologies.

This track invites participation from both academic and industry researchers working in any aspect related to e-Health. The e-Health SAC Symposium solicits original contributions in, but not limited to, the following topics of interest:

- Advanced Signal Processing for e-Health
- Analysis and management of electronic health records
- Artificial intelligence and machine learning for healthcare
- Autonomic diagnosis and situation awareness (Fall, Activity, etc.)
- Big data analytics for healthcare
- Biomedical and biosensors engineering
- Communication protocols and algorithms for eHealth

- Context and content aware based e-Health systems
- Context awareness and autonomous computing for AAL (Ambient Assisted Living)
- E-Health-oriented software architectures (Agent, SOA, Middleware, etc.)
- E-Health systems based on social technologies
- E-Health systems for Integrated Care
- Emerging e-Health applications
- Energy saving for long time monitoring
- Future mobile networks for Healthcare (5G networks and beyond)
- Future technologies for Digital Medicine
- Health and wellness measurement, monitoring and intervention
- Health grid and health cloud
- Health information systems
- Health monitoring and traffic characterization
- In-Body medical sensors communications
- ICT-enabled healthcare system
- Image and video processing for e-Health
- Internet of Things (IoT) for e-Health
- Interoperability issues in e-Health
- Mobile and cloud computing for e-Health
- Molecular sensor communications
- Personal and body area networks
- Precision and personalized medicine
- Security, trust and privacy in e-Health
- Sensing of vital signs and signatures
- Telemedicine and Mobile Healthcare
- Usability, user experience and acceptability in e-Health
- Wearable medical wireless sensors
- Wireless coverage and interference issues in e-Health applications

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.