



SAC Symposium: E-Health

Co-Chairs

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Scope and Motivation

The e-Health track aims to bring together healthcare professionals, researchers, scientists, engineers, academics, and students from all around the world to share their experiences and the latest advances in new technologies and systems development in different healthcare and medicine applications. In particular, the e-Health track of the SAC symposium will focus on the advancements in e-Health and medical communications. It will provide an opportunity for researchers all around the world to share their work and contributions in the field of healthcare. The integration of Information and Communications Technology (ICT) into healthcare has opened new possibilities in the medical field and provided a needed relief in overstressed healthcare institutions. Wireless devices and systems for health monitoring, detection, and prediction of medical conditions are among the enabling tools and technologies that have improved the existing healthcare domain. However, enormous challenges 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 and early diagnosis of diseases and more effective treatments.

Topics of Interest

To ensure a wide coverage of the advances in this field, the e-Health Track of the SAC Symposium solicits original contributions in, but not limited to, the following topical areas:

- Telemedicine and mobile telemedicine
- Advanced signal processing for e-Health
- Big data analytics for healthcare
- Biomedical and biosensors engineering
- Sensing of vital signs and signatures
- Analysis and management of electronic health records
- Wearable medical wireless sensors
- Wireless coverage and interference issues in e-Health applications
- Health monitoring and traffic characterization

- SecuriArtificial intelligence and machine learning for healthcare
- Energy saving for long-time monitoring
- In-body medical sensor communications
- Communication protocols and algorithms for e-Health
- Molecular sensor communications
- e-Health-oriented software architectures
- Context awareness and autonomous computing for AAL (Ambient Assisted Living)
- Autonomic diagnosis and situation awareness (Fall, Activity, etc.)
- Health and wellness measurement, monitoring, and intervention, trust, and privacy in e-Health
- Future mobile networks for healthcare (beyond 5G networks)
- Emerging e-Health applications
- Future technologies for digital medicine
- Mobile and cloud computing for e-Health
- Health information systems and interoperability
- Context and content-aware based e-Health systems
- e-Health systems based on social technologies
- Health grid and health cloud
- ICT-enabled healthcare system
- Internet of Things (IoT) for e-Health
- e-Health systems for integrated care
- Future technologies for the health of the aging brain
- Image, audio, and video processing for e-Health

Biographies of the Co-Chairs

Andrea Sciarrone got his bachelor degree in 2007 and his master of science in 2009, both in in Telecommunication Engineering. In 2014 he got a Ph.D. in Science and Technology for Information and Knowledge at the University of Genoa. Currently, he is Assistant Professor in the research staff of the Telecommunication Group and, in particular of the Digital Signal Processing (DSP) Laboratory at the DITEN department of the University of Genoa. His main research activities concern e-health applications, signal processing over Internet of Things and Context and Location Awareness. He is an active member of the IEEE ComSoc e-Health TC since 2013. He is IEEE Communications Society (ComSoc) and IEEE Signal Processing (SPS) Societies member. He is the author of around 30 papers including journals, conferences proceedings. He is the recipient of the IEEE Cloudnet 2016 Best Paper Awards. His research concerns Signal Processing over Internet of Things, Context and Location Awareness and Safety and e-health Applications.

Ayan Mondal is an Assistant Professor in the Department of Computer Science and Engineering at the Indian Institute of Technology (IIT) Indore, India. Prior to this, he worked as a Research Engineer at Univ Rennes, INRIA, CNRS, IRISA, France. He was also a Visiting Professor at the Centre for Wireless Communications - Networks and Systems, University of Oulu, Finland, in 2023. He earned his Ph.D. degree from the Department of Computer Science and Engineering, IIT Kharagpur, India, in 2020. He was a visiting researcher at Inria, Rennes, France, in 2019. He is an IEEE Senior Member and ACM Professional Member.

How to Submit a Paper

All papers for technical symposia should be submitted via EDAS. Full instructions on how to submit papers and important deadlines are posted at <https://icc2025.ieee-icc.org/>

The authors of selected papers from this symposium will be invited to submit an extended version of their work for fast-track review and possible publication in the IEEE Open Journal of the Communications Society.