First International Workshop on Mobile e-Health in the Era of big Data, Internet of things and Cloud cOmputing (MEDICO)

In conjunction with European Wireless 2018, "Wireless Futures in the Era of Network Programmability", May 2-4 2018 Catania (Italy)

Call for papers

Wireless networking, mobile computing, mobile and wireless communications, pervasive computing and networking, and services and applications are pushing traditional sectors through major paradigm shifts. Healthcare is a broad application field heavily affected by such shift as distributed collection, processing, and consumption of data from large numbers of both healthy and in-treatment people has become possible at unanticipated levels. Starting from the non-intrusive collection of masses of continuously updated information, ICT allow to discover unknown patterns, trends, correlations, that can point to more effective diagnoses, prognoses, and prevention of diseases, and also allow better customer service, improved operational efficiency, and increased or new revenue possibilities. Other fundamental technologies and paradigms that participate with (mobile) wireless technologies to the evolution of e-Health are SDN, IoT, Cloud Computing, and Big Data analytics. Therefore the application of new ICT paradigms to healthcare is a multidisciplinary effort, carried on by communications and computer scientists, biotechnologists, and medicine scientists and practitioners. Together with unhoped-for opportunities, such broad spectrum of researchers and health care stakeholders at large face increasing difficulties in keeping-up with, managing, and fully leveraging the interactions among the new technologies. This workshop focuses on bringing together researchers and practitioners in wireless and mobile computing, biomedical and machine learning experts, cloud and fog computing researchers, and healthcare professionals, to showcase the progress, algorithms, and applications for a smart e-health. This involves the discussion of the process, tools, algorithms and technologies for collecting, analyzing, and extracting value from data generated by large-scale mobile users populations.
We call for original and unpublished papers with no longer than 6 pages.

Likely contributors and target audience

Contributors are expected among researchers, experts and practitioners in wireless communications and mobile computing, biomedical engineering, medicine and healthcare, machine learning, (big-) data analytics, cloud and fog computing, IoT. Due to the strong multidisciplinary nature of the workshop topics, the research communities involved will be also the main target audience, further augmented with stakeholders in healthcare research and industry.

Topics

Potential topics include, but are not limited to:

* Communication/network infrastructures, architectures and protocols for e-Health
* Quality of experience (QoE) with mobile e-Health services/applications.
* Security, privacy and trust for mobile e-Health services/applications
* Computing/storage infrastructures for e-Health such as clouds and virtualization
* Software, systems and performance engineering for mobile e-Health
* e-Healthcare, m-Healthcare, x-Health
* Telehealth, Telecare, Telemonitoring, Telediagnostics
* Narrowband technology
* 5G
* Soft-SIM technology
* Power-efficient communication
* Ultra-wideband communication
* Delay-tolerant, fault-tolerant and reliable communication
* Cognitive communication for medical bands
* In-hospital networking, body area networking and cloud-integrated networking
* Assisted Living
* Smartphones in BME Applications
* Social Networking, Computing and Education for Health
* Cloud computing applications for e-Health
* Internet of Things (IoT) applications for e-Health
* Clinical Informatics
* Sensor-based m-Health applications
* Proximity-based communication, group communication and social networks
* Software-defined networks and network management
* Network Function Virtualization
* Nanoscale/molecular communications
* Network coding and error detection/correction
* Resilience and robustness
* Internet of Things, Ambient intelligence and pervasive computing
* Augmented reality and human-computer interaction
* Motion detection and activity recognition
* Robotics
* Collaboration tools such as social media, web apps, patient education
* Patient Diagnosis Methods
* Patient Monitoring Systems
* Health Care Information Systems
* High-confidence medical devices
* Integration of medical devices with e-Health
* Medical devices interoperability
* Wearable devices

Paper submission

All submissions must describe original research, not published or currently under review for another workshop, conference, or journal.

Papers must be submitted electronically to EDAS by February 25, 2018,
11:59pm CET, at the following link:
https://edas.info

Organizers and contact information

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Important dates

Manuscripts Due: February 25, 2018 (FINAL DEADLINE)
Acceptance Notification: March 10, 2018.
Camera-ready Submission: March 17, 2018.