

Preface

The EAI International Conference on IoT Technologies for HealthCare (HealthyIoT) focuses on Internet of Things (IoT) technologies for health care. The 2016 conference was the third scientific event in the series bringing together expertise from technological, medical, social, and political domains. The IoT, as a set of existing and emerging technologies, notions, and services, can provide many solutions for the delivery of electronic health care, patient care, and medical data management. The event brought together technology experts, researchers, industry and international authorities contributing toward the assessment, development, and deployment of health care solutions based on IoT technologies, standards, and procedures. HealthyIoT 2016 also included the First Workshop on Emerging eHealth through Internet of Things (EHIoT 2016). Thus, it opened a new chapter in the success story of the series of international conferences on HealthyIoT by presenting keynotes, oral presentations, short poster presentations, and the workshop provided by more than 100 authors from 15 countries from various parts of the world.

HealthyIoT 2016 benefited from the experience and the lessons learned from the Organizing Committees of previous HealthyIoT events, particularly HealthyIoT 2014 and HealthyIoT 2015. Both conferences were co-located events that took place in Rome, Italy, forming one of the main conferences of the IoT360 Summit. The conferences were organized by CREATE-NET in collaboration with the European Alliance for Innovation in Slovakia, and its partner, the European Alliance for Innovation in Trento, Italy. Additionally, HealthyIoT 2015 also included the First Workshop on Embedded Sensor Systems for Health through Internet of Things (ESS-H IoT 2015) with the aim of using embedded sensor systems in health monitoring applications considering the future vision of IoT.

This proceedings volume comprises a total of 31 research papers out of 43 submissions, with contributions by researchers across Europe and around the world. Among them, 20 oral presentations to the HealthyIoT 2016 conference, eight poster presentations, and three oral presentations to the EHIoT 2016 workshop. All submissions were carefully and critically reviewed by at least two independent experts from the scientific Program Committee and international reviewers. The highly selective review process resulted in an acceptance rate of 72%, thereby guaranteeing a high scientific level of the accepted and finally published papers. The publication includes manuscripts written and presented by authors from different countries, including the UK, Sweden, Turkey, Japan, Belgium, Saudi Arabia, United States, Portugal, Italy, Thailand, Slovakia, France, Pakistan, Australia, and Bosnia and Herzegovina. Topics including “Health-Care Support for the Elderly,” “Real-Time Monitoring Systems,” “Security, Safety and Communication,” “Smart Homes and Smart Caring Environments,” “Intelligent Data Processing and Predictive Algorithms in eHealth,” “Emerging eHealth IoT Applications,” “Signal Processing and Analysis,” and “The Smartphone as a HealthyThing,” are covered.

The HealthyIoT 2016 conference would not have been possible without the supporters and sponsors including the European Alliance for Innovation (EAI), CREATE-NET, Springer, Mälardalen University, Microsoft, and other the local sponsors.

The editors are also grateful to the dedicated efforts of the Organizing Committee members and their supporters for carefully and smoothly preparing and operating the conference. They especially thank all team members from the Embedded Sensor Systems for Health, Mälardalen University, Västerås, Sweden, for their dedication to the event. In conclusion, we would like to once again express our sincere thanks to all the authors and attendees of the conference in Västerås, Sweden, and also the authors who contributed to the creation of this HealthyIoT 2016 publication.

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