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**225**

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Mobyen Uddin Ahmed · Shahina Begum  
Jean-Baptiste Fasquel (Eds.)

# Internet of Things (IoT) Technologies for HealthCare

4th International Conference, HealthyIoT 2017  
Angers, France, October 24–25, 2017  
Proceedings

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## Preface

The International Conference on IoT Technologies for Health Care (HealthyIoT), is an international conference that focuses on Internet of Things (IoT) technologies for health care. HealthyIoT 2017 was the fourth scientific event in the EAI series and was held during October 24–25 in Angers, France. The conference brings together experts from technological, medical, social, and political domains. The IoT, as a set of existing and emerging technologies, notions, and services, can provide many solutions to the delivery of electronic health care, patient care, and medical data management. The 2017 event brought together technology experts, researchers, professionals from, industry, and international authorities contributing toward the assessment, development, and deployment of health-care solutions based on IoT technologies, standards, and procedures. Thus, it opened a new chapter in the success story of the series of international conferences on HealthyIoT by presenting keynotes, oral presentations, and short poster presentations provided by more than 54 authors from ten countries from various parts of the world.

HealthyIoT 2017 benefitted from the experience and the lessons learned by the Organizing Committees of previous HealthyIoT events, particularly HealthyIoT 2014, HealthyIoT 2015, and HealthyIoT 2016. HealthyIoT 2016 was a stand-alone conference held in Västerås, Sweden, and organized by Mälardalen University, Sweden. HealthyIoT 2014 and HealthyIoT 2015 were co-located events, which took place in Rome, Italy, forming one of the main conferences in 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 2016 also included the First Workshop on Emerging eHealth through Internet of Things (EHIoT 2016) and HealthyIoT 2015 included the First Workshop on Embedded Sensor Systems for Health Through the Internet of Things (ESS-H IoT 2015) with the aim of using embedded sensor systems in health-monitoring applications considering the future vision of the Internet of Things.

This proceedings volume includes 17 research papers selected out of 23 submissions, with contributions by researchers across Europe and around the world. Among them, 13 oral presentations at the HealthyIoT 2017 conference and four poster presentations. All submissions were carefully and critically reviewed by at least three independent experts from the Program Committee and by international reviewers. The highly selective review process resulted in a 74% acceptance rate, thereby guaranteeing a high scientific level of the accepted and finally published papers. The publication includes manuscripts written and presented by authors from Sweden, Germany, Saudi Arabia, India, Italy, Lebanon, Israel, France, Spain, UK, Bosnia and Herzegovina. A variety of topics are covered 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; the Smartphone as a healthything; machine learning and deep learning; and cloud computing.

The HealthyIoT 2017 conference would not have been possible without the supporters and sponsors European Alliance for Innovation (EAI), CREATE-NET, Springer, University of Angers, France, the City of Angers, France, Angers Loire Métropole urban community, 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 running the conference. They especially thank all team members from the University of Angers, France, 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 Angers, France, and also the authors who contributed to the creation of this HealthyIoT 2017 publication.

January 2018

Mobyen Uddin Ahmed  
Shahina Begum  
Jean-Baptiste Fasquel

*The original version of the book was revised:  
In an older version of this proceedings  
volume, there was a mistake in the third  
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