

Preface

We are experiencing an era of profound transformation in which mobile ubiquitous connection makes it possible to have real innovation in health care and well-being services.

The market availability of wearable devices that are deeply integrated in everyday objects like watches and garments also enhances the possibility to have a continuous monitoring of parameters and functions. A huge amount of data are generated and new challenges emerge from their efficient management and processing.

This is the worldwide technological scenario of the so-called wearable decade, in which various tiny pieces of high technology become part of us, as computers and mobile phones did in the 2000s.

We operate in this infinitely mutable and extraordinarily fast scenario, with the aim to design innovations and new perspectives without forgetting the human dimension, which is the key and driving factor. For many years, technology has been the hub of innovation and development, forgetting that systems and devices are developed for humans, who should indeed be the center of the entire process. We believe that starting from the human dimension, taking a cue from disciplines such as ergonomics and design, can help researchers to develop and implement real tools fitting into everyday objects and life, which in the middle/long term means health.

In this edition of the 6th EAI International Conference on Wireless Mobile Communication and Health Care – MobiHealth 2016, held in Milan, Italy, November 14–16, 2016 – we tried to integrate this multidisciplinary approach and vision in order to bring together for the first time engineers with designers and other non-engineering professionals to create a heterogeneous community that can give life to a new way of innovation.

The conference was communicated through the standard Web channels in particular reaching out to the participants of previous editions with a call for papers, and sending a dedicated invitation to recognized experts in m-health and related topics.

We received 57 papers, about 70% from the first traditional channel and about 30% from selected invitations. Each paper was reviewed by at least two independent experts identified among the Organizing Committee and the EAI experts selected by keywords. Only papers that were positively assessed by both reviewers were accepted. Specific comments were made and sent to the authors to improve the final submission.

Moreover, in keeping with the scope of the conference, at MobiHealth 2016 three distinguished experts presented talks on mobile and pervasive health innovations:

- Giuseppe De Pietro – “Mobile Health Care and Electronic Health Records” – presented the frame of “smart” m-health applications for the personal citizen agenda (PCA) in Italy.
- Enrico Profumo – “How To Make It Happen: Which Are the Driving Forces Shaping Health Care” – analyzed the digitalization in health systems and the problem related to security.

- Maria Renata Guarneri – “Multidimensional ICT System for Motivating Behavioral Changes Toward Healthier Lifestyles for Overweight and Obesity Prevention” – presented the experience of the EU-funded PEGASO F4F project, which uses mobile apps, wearable devices, and videogames to encourage teenagers to adopt a healthy lifestyle.

The papers and related presentations were divided into ten sessions:

1. Technological development for m-health applications
2. Promotion of healthy lifestyle
3. Devices for m-health
4. Smart applications for clinical care
5. IOT for m-health
6. Mobile applications for health
7. Design approach for m-health solutions
8. Feel the fall
9. Machine learning in mH_applications
10. Systems and apps for movement analysis

The conference also included a special session on “Advances in Soft Wearable Technology for Mobile Health” and three workshops:

1. Advances in Personalized Health-Care Services, Wearable Mobile Monitoring, and Social Media Pervasive Technologies
2. Emerging Experiences into Receiving and Delivering Health Care Through Mobile and Embedded Solutions
3. e-Health: The 21st Century Games Revolution

The conference ended with a final round table bringing together the scientific representatives of high-level research projects (all EU-funded projects in the e-health field) to share experiences and lay out future directions.

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Finally, we would like to thank all the participants for their hard work in preparing the manuscripts and the presentations. The papers included in these proceedings are the final result of a great amount of creative work and a highly selective review process. We hope that they will serve as a valuable source of information on the state of the art of mobile health and technology.

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