EAI/Springer Innovations in Communication and Computing

Chika Sugimoto Hamed Farhadi Matti Hämäläinen *Editors* 

# 13th EAI International Conference on Body Area Networks





# **EAI/Springer Innovations in Communication and Computing**

#### Series editor

Imrich Chlamtac, European Alliance for Innovation, Ghent, Belgium

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# 13th EAI International Conference on Body Area Networks





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## Preface

We are delighted to introduce the proceedings of the first edition of the 2018 European Alliance for Innovation (EAI) International Conference on Body Area Networks (BODYNETS). This conference has brought researchers, developers and practitioners around the world who are leveraging and developing WBAN technology for wearable communications and personal health management. The theme of BODYNETS 2018 was "Technologies providing information from inside a body as well as on- and off-body devices."

The technical program of BODYNETS 2018 consisted of 39 full papers. The conference had a main track and four special tracks. The special tracks were Track 1—Ultra Wide Band for Body Area Networks (UWBAN); Track 2—Smart Body Area Networks (SmartBAN); and Track 3—Antenna/Propagation and WiBEC project (APWiBEC). Aside from the high-quality technical paper presentations, the technical program also featured two keynote speeches, three invited speeches, and one panel. The two keynote speeches were given by Prof. Emil Jovanov from the University of Alabama, USA, and Prof. William Scanlon from Queen's University Belfast, United Kingdom. The invited speeches were presented by Prof. DK Arvind from the University, Japan, and Dr. John Farserotu from CSEM, Switzerland. The title of the panel was "Technological Trends and Challenges for Future Healthcare." The panel aimed to enrich our understanding of future trends the healthcare procedures are nowadays going to, and give insights into their key challenges.

Coordination with the steering chair, Imrich Chlamtac, and the general chair, Matti Hämäläinen, was essential for the success of the conference. We sincerely appreciate their constant support and guidance. It was also a great pleasure to work with such an excellent organizing committee for their hard work in organizing and supporting the conference: in particular, the Technical Program Committee, led by our TPC Co-Chairs, Prof. Jari Iinatti, Prof. Lorenzo Mucchi, Prof. Carlos Pomalaza-Raez, and Prof. Daisuke Anzai who have completed the peer-review process of technical papers. We are also grateful to the conference manager, Radka Pincakova, for her support and all the authors who submitted their papers to the BODYNETS 2018 conference and workshops.

We strongly believe that the BODYNETS conference provides a good forum for all researchers, developers, and practitioners to discuss all science and technology aspects that are relevant to Wireless BAN. We also expect that the future BODYNETS conference will be as successful and stimulating as indicated by the contributions presented in this volume.

Yokohama, Japan Stockholm, Sweden Chika Sugimoto Hamed Farhadi

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