Record Nr. UNINA9910299918003321 Advances in Human Factors in Wearable Technologies and Game Design **Titolo** : Proceedings of the AHFE 2017 International Conference on Advances in Human Factors and Wearable Technologies, July 17-21, 2017, The Westin Bonaventure Hotel, Los Angeles, California, USA / / edited by Tareq Ahram, Christianne Falcão Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2018 3-319-60639-5 **ISBN** Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XI, 268 p. 115 illus.) Advances in Intelligent Systems and Computing, , 2194-5357;; 608 Collana Disciplina 610.28 Soggetti Biomedical engineering User interfaces (Computer systems) Artificial intelligence Computational intelligence Biomedical Engineering and Bioengineering User Interfaces and Human Computer Interaction Artificial Intelligence Computational Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto A wearable flexible sensor network platform for the analysis of different sport movements -- Emotion recognition using physiological signals: Laboratory vs. wearable sensors -- A wearable device supporting multiple touch- and gesture-based languages for the deafblind -- A step in the right direction - privacy concerns and perceived sensitivity of fitness trackers -- Development of customized orthotics based on lower-leg anthropometric data and task -- An intelligent pen to assess anxiety levels through pressure sensors and fuzzy logic --Real-time eye-interaction system developed with eye tracking glasses and motion capture -- Accuracy and efficiency validation of a helmet mounted vibrotactile feedback system for aerodynamic head position

during cycling -- The pressure comfort sensation of female's body parts caused by compression garment -- Wearability and user experience through user engagement: The case study of a wearable plurisensorial device -- The implementation of acoustic in the game design-insight from the recently "onmyoji" phenomenon in China -- Game design for students: Teaching as a whole context -- Gaming as a driver for social behavior change for sustainability.

Sommario/riassunto

This book focuses on the human aspects of wearable technologies and game design, which are often neglected. It shows how user centered practices can optimize wearable experience, thus improving user acceptance, satisfaction and engagement towards novel wearable gadgets. It describes both research and best practices in the applications of human factors and ergonomics to sensors, wearable technologies and game design innovations, as well as results obtained upon integration of the wearability principles identified by various researchers for aesthetics, affordance, comfort, contextual-awareness. customization, ease of use, ergonomy, intuitiveness, obtrusiveness, information overload, privacy, reliability, responsiveness, satisfaction, subtlety, user friendliness and wearability. The book is based on the AHFE 2017 Conferences on Human Factors and Wearable Technologies and AHFE 2017 Conferences on Human Factors and Game Design, held on July 17-21, 2017, in Los Angeles, California, USA, and addresses professionals, researchers, and students dealing with the human aspects of wearable, smart and/or interactive technologies and game design research.