Record Nr. UNINA9910337609903321 Applications in Electronics Pervading Industry, Environment and Society Titolo : APPLEPIES 2018 / / edited by Sergio Saponara, Alessandro De Gloria Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-11973-4 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (464 pages) Collana Lecture Notes in Electrical Engineering, , 1876-1100; ; 573 Disciplina 621.381 Soggetti Electronics Microelectronics Computer engineering Internet of things Embedded computer systems Big data Electronics and Microelectronics, Instrumentation Cyber-physical systems, IoT Big Data Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Raspberry Pi 3 Performance Characterization in an Artificial Vision Automotive Application -- Analysis of Cybersecurity Weakness in Automotive In-Vehicle Networking and Hardware Accelerators for Realtime Cryptography -- Testing Facility for the Characterization of the Integration of E-Vehicles into Smart Grid in Presence of Renewable Energy -- On-the-fly Secure Group Communication on CAN Bus --Neuromuscular Disorders Assessment by FPGA-based SVM Classification of Synchronized EEG/EMG -- Functional Near Infrared Spectroscopy system validation for simultaneous EEG-fNIRS measurements. Sommario/riassunto This book provides a thorough overview of cutting-edge research on electronics applications relevant to industry, the environment, and society at large. It covers a broad spectrum of application domains, from automotive to space and from health to security, while devoting

special attention to the use of embedded devices and sensors for imaging, communication and control. The book is based on the 2018 ApplePies Conference, held in Pisa, Italy in September 2018, which brought together researchers and stakeholders to consider the most significant current trends in the field of applied electronics and to debate visions for the future. Areas addressed by the conference included information communication technology; biotechnology and biomedical imaging; space; secure, clean and efficient energy; the environment; and smart, green and integrated transport. As electronics technology continues to develop apace, constantly meeting previously unthinkable targets, further attention needs to be directed toward the electronics applications and the development of systems that facilitate human activities. This book, written by industrial and academic professionals, represents a valuable contribution in this endeavor.