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Altri autori (Persone)	HottaKazuhiro YousefMalik LiuHui SaggioGiovanni SchlieterHannes FredAna GamboaHugo
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Soggetti	Medical informatics Application software Computer engineering Computer networks Artificial intelligence Image processing - Digital techniques Computer vision Health Informatics Computer and Information Systems Applications Computer Engineering and Networks Artificial Intelligence Computer Imaging, Vision, Pattern Recognition and Graphics
Lingua di pubblicazione	Inglese
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-- Biomedical Electronics and Devices: -- A Sensitive Method to Rapidly Identify GBS. -- Low-Cost Flexible Sensor Glove For Measuring Functional Finger Range of Motion In Daily Activities. -- EMG-Based Action Unit Recognition: Feature Engineering, Machine Learning, and Real-Time Classification. -- RehabVisual: A Platform for Visual Stimulation Applied to Patients with Multiple Sclerosis. -- Design and Numerical Optimization of a Lab-on-a-Chip Device for Blood Cells' Analysis. -- Cardiorespiratory and Bicep Muscle Responses to Assembly Line Work Volume. -- Towards the Development of Safer Biomedical Devices for ECG Acquisition: Using DPI for the Assessment of Electromagnetic Susceptibility. -- Bioimaging: -- A Comparative Study of Deep Neural Network Architectures in Magnification Invariant Breast Cancer Histopathology Image Analysis -- Cross-Domain Evaluation of Few-Shot Classification Models: Natural Images vs. Histopathological Images. -- Bioinformatics Models, Methods and Algorithms: -- Modeling the Mechanism of Sprouting Angiogenesis in Tumor Using Petri Nets. -- A Linear Algorithm for Efficient Representation of k-mer Sets Using De Bruijn Graphs. -- Hematoxylin and Eosin Stained Images Artificially Generated by StyleGAN Model Conditioned on Immunohistochemical Ki67 Index. -- Patch Based Analysis with Machine Learning to Aid Breast Cancer Recurrence Prediction. -- Bio-inspired Systems and Signal Processing: -- Advancements in Camera-Based Oxygen Desaturation Monitoring in Sleep Apnea Patients. -- Technical Test of a Dry Electrode Headset for EEG Measurement Under Microgravity. -- Muscle Synergy and Co-Contraction Effects on Joystick Manipulation. -- Health Informatics: -- Application of Formal Concept Analysis to Characterize Social Behaviors. -- Combining Languages to Set a PACS on FHIR. -- Evaluating the Viability of Neural Networks for Analyzing Electromyography Data in Home Rehabilitation: Estimating Load on the Leg. -- Enhancing Emotional Well-Being through Virtual Reality: The 2ViTA-B Cognitive System. -- Predicting the Bed Occupancy in a Hospital. -- Markov Chain Analysis of Interpersonal Attachment Measured by a Digital Application: An Observational Study. -- Elevating Heart Failure Care: Innovations in Remote Patient Monitoring Through the RETENTION Platform. -- Semantic Integration of Heterogeneous PGHD Sources in a Digital Health System. -- Classification of Augmented Motor Imagery Data Using Various Representations of Feature Vectors. -- Diagnosis of Resting Tremor in Parkinson's Disease Using Accelerometer and Gyroscope Sensors Built into a Smartwatch.

Sommario/riassunto

This volume constitutes the revised selected papers of 17th International Joint Conference on Biomedical Engineering Systems and Technologies, BIOSTEC 2024, in Rome, Italy, during February 21–23, 2024. The 15 full papers and 11 short papers presented in these proceedings were carefully reviewed and selected from 242 submissions. The papers are organized in the following topical sections: Biomedical Electronics and Devices; Bioimaging; Bioinformatics Models, Methods and Algorithms; Bio-inspired Systems and Signal Processing; Health Informatics.