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| Autore                  | Roque Ana Cecília A   |
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| Descrizione fisica      | 1 online resource (452 pages)   |
| Collana                 | Communications in Computer and Information Science, , 1865-0937 ; ; 1814  |
| Altri autori (Persone)  | GracaninDenis<br>LorenzRonny<br>TsanasAthanasios<br>BierNathalie<br>FredAna<br>GamboaHugo   |
| Disciplina              | 610.285   |
| Soggetti                | Medical informatics<br>Computer networks<br>Computer systems<br>Image processing—Digital techniques<br>Computer vision<br>Artificial intelligence<br>Health Informatics<br>Computer Communication Networks<br>Computer System Implementation<br>Computer Imaging, Vision, Pattern Recognition and Graphics<br>Artificial Intelligence |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di contenuto       | Papers -- First Version of a Support System for the Medical Diagnosis of Pathologies in the Larynx -- Analysis of Extracellular Vesicle Data on Fluorescence and Atomic Force Microscopy Images -- Automated  |

Segmentation of Patterned Cells in Micropatterning Microscopy Images -- Automated Data Adaptation for the Segmentation of Blood Vessels -- Security Analysis of the Internet of Medical Things (IoMT): Case Study of the Pacemaker Ecosystem -- Parallel Lossy Compression for Large FASTQ Files -- Comparing Different Dictionary-based Classifiers for the Classification of Volatile Compounds Measured with an E-nose -- High-Level Features for Human Activity Recognition and Modeling -- Data Augmentation based on Virtual Wrist Devices for Fall Detection -- Propagation of Response Signals Registered in EEG under Photostimulation -- Mobile Tele-Dermatology Use among University Students: A Pilot Study at Saint Joseph University (USJ) -- Predictive Alarm Prevention by Forecasting Threshold Alarms at the Intensive Care Unit -- ST-segment Anomalies Detection from Compressed Sensing based ECG Data by Means of Machine Learning -- A Proof-of-Concept Implementation Based on the Framework of AI-Enabled Proactive mHealth: Health Promotion with Motivation -- Improved Blood Vessels Segmentation of Infant Retinal Image -- On the Impact of the Vocabulary for Domain-Adaptive Pretraining of Clinical Language Models -- A Systematic Literature Review of Extended Reality Exercise Games for the Elderly -- Simulating the Vital Signs of a Digital Patient Undergoing Surgery, for the Purpose of Training Anaesthetists -- A Multi-Modal Dataset (MMSD) for Acute Stress Bio-markers -- On the Use of WebAssembly for Rendering and Segmenting Medical Images -- Referable Diabetic Retinopathy Detection using Deep Feature Extraction and Random Forest.

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#### Sommario/riassunto

This book constitutes the refereed post-proceedings of the 15th International Conference on Biomedical Engineering Systems and Technologies, BIOSTEC 2022, held as a Virtual Event, during February 9–11, 2022. The 21 full papers included in this book were carefully reviewed and selected from 262 submissions. The papers selected to be included in this book contribute to the understanding of relevant trends of current research on Biomedical Engineering Systems and Technologies, including: Pattern Recognition and Machine Learning, Application of Health Informatics in Clinical Cases, Evaluation and Use of Healthcare IT, Medical Signal Acquisition, Analysis and Processing, Data Mining and Data Analysis, Decision Support Systems, e-Health, e-Health Applications, Mobile Technologies for Healthcare Applications and Medical Devices design.

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