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Nota di contenuto	Chapter 1. Functional Thermal Imaging of Skin Tissue Using the Discrete Thermal Time Constants Spectrum -- Chapter 2.Contextual Classication of Tumor Growth Patterns in Digital Histology Slides -- Chapter 3. Cervical Histopathology Image Classication Using Ensembled Transfer Learning -- Chapter 4. Functional Kidney Analysis Based on Textured DCE-MRI Images -- Chapter 5. Incorporating Patient Photographs in the Radiology Image Acquisition & Interpretation Process -- Chapter 6. Iterative Statistical Reconstruction Algorithm Based on C-C Data Model with the Direct Use of Projections Performed in Spiral Cone-beam CT Scanners -- Chapter 7. Deformable Mesh for Regularization of Three-Dimensional Image Registration -- Chapter 8. Simulator for Modelling Confocal Microscope Distortions -- Chapter 9. Electromyography Based Translator of the Polish Sign Language -- Chapter 10. Electrooculography Application in Vision Therapy Using

	Smart Glasses -- Chapter 11.Assessment of Muscle Fatigue, Strength and Muscle Activation During Exercises with the Usage of Robot Luna EMG, Among Patients with Multiple Sclerosis.
Sommario/riassunto	This book provides a comprehensive overview of advances in the field of medical data science, presenting carefully selected articles by leading information technology experts. Information technology, as a rapidly evolving discipline in medical data science, with significant potential in future healthcare, and multimodal acquisition systems, mobile devices, sensors, and AI-powered applications has redefined the optimization of clinical processes. This book features an interdisciplinary collection of papers that have both theoretical and applied dimensions, and includes the following sections: Medical Data Science Quantitative Data Analysis in Medical Diagnosis Data Mining Tools and Methods in Medical Applications Image Analysis Analytics in Action on SAS Platform Biocybernetics in Physiotherapy Signal Processing and Analysis Medical Tools & Interfaces Biomechanics and Biomaterials. As such, it is a valuable reference tool for scientists designing and implementing information processing tools used in systems that assist clinicians in patient care. It is also useful for students interested in innovations in quantitative medical data analysis, data mining, and artificial intelligence.