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   Titolo A Context Aware Decision-Making Algorithm for Human-Centric Analytics

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Sommario/riassunto	This reference demonstrates the development of a context aware decision-making health informatics system with the objective to automate the analysis of human centric wellness and assist medical decision-making in healthcare. The book introduces readers to the basics of a clinical decision support system. This is followed by chapters that explain how to analyze healthcare data for anomaly detection and clinical correlations. The next two sections cover machine learning techniques for object detection and a case study for hemorrhage detection. These sections aim to expand the understanding of simple and advanced neural networks in health informatics. The authors also explore how machine learning model choices based on context can assist medical professionals in different scenarios. Key Features Reader-friendly format with clear headings, introductions and summaries in each chapter Detailed references for readers who want to conduct further research Expert contributors providing authoritative knowledge on machine learning techniques and human-centric wellness Practical applications of data science in healthcare designed to solve problems and enhance patient wellbeing Deep learning use cases for different medical conditions including hemorrhages, gallbladder stones and diabetic retinopathy Demonstrations of fast and efficient CNN models with varying parameters such as Single shot detector, R-CNN, Mask R-CNN, modified contrast enhancement and improved LSTM models. This reference is intended as a primary resource for professionals, researchers, software developers and technicians working in healthcare informatics systems and medical diagnostics. It also serves as a supplementary resource for learners in bioinformatics, biomedical engineering and medical informatics programs and anyone who requires technical knowledge about algorithms in medical decision support systems. Readership Healthcare professionals, software developers, engineers, diagnostic technicians, students, academicians and machine learning enthusiasts.