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Autore	Imoize Agbotiname Lucky
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Nota di contenuto	Chapter 1: Explainable artificial intelligence (XAI) in medical decision systems (MDSSs): healthcare systems perspective -- Chapter 2: Explainable artificial intelligence (XAI) in medical decision support systems (MDSS): applicability, prospects, legal implications, and challenges -- Chapter 3: Explainable Artificial Intelligence-based framework for medical decision support systems -- Chapter 4: Prototype interface for detecting mental fatigue with EEG and XAI frameworks in Industry 4.0 -- Chapter 5: XAI for medical image segmentation in medical decision support systems -- Chapter 6: XAI robot-assisted surgeries in future medical decision support systems -- Chapter 7: Prediction of erythemato squamous-disease using ensemble learning framework -- Chapter 8: Security-based explainable artificial intelligence (XAI) in healthcare system -- Chapter 9: Explainable dimensionality reduction model with deep learning for diagnosing hypertensive retinopathy -- Chapter 10: Understanding cancer patients with diagnostically influential factors using high-dimensional data embedding -- Chapter 11: Explainable neural networks in diabetes mellitus prediction -- Chapter 12: A KNN and ANN model for predicting

heart diseases -- Chapter 13: Artificial Intelligence-enabled Internet of Medical Things for COVID-19 pandemic data management -- Chapter 14: A deep neural network for the identification of lead molecules in antibiotics discovery -- Chapter 15: Statistical test with differential privacy for medical decision support systems -- Chapter 16: Automated decision support system for diagnosing sleep diseases using machine intelligence techniques -- Chapter 17: XAI methods for precision medicine in medical decision support systems -- Chapter 18: The psychology of explanation in medical decision support systems.

Sommario/riassunto

This edited book gives insights into the deployment, application, management, and benefits of explainable artificial intelligence (XAI) in medical decision support systems (MDSS). The book discusses XAI-based analytics for patient-specific MDSS as well as related security and privacy issues.