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Titolo	AI for Disease Surveillance and Pandemic Intelligence : Intelligent Disease Detection in Action / / edited by Arash Shaban-Nejad, Martin Michalowski, Simone Bianco
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Collana	Studies in Computational Intelligence, , 1860-9503 ; ; 1013
Disciplina	610.28563
Soggetti	Computational intelligence Biomedical engineering Engineering - Data processing Artificial intelligence Computational Intelligence Biomedical Engineering and Bioengineering Data Engineering Artificial Intelligence
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Digital Technologies for Clinical, Public and Global Health Surveillance -- Imputing Fine-grain Patterns of Mental Health with Statistical Modelling of Online Data -- Lexical and Acoustic Correlates of Clinical Speech Disturbance in Schizo-phrenia.-A Prognostic Tool to Identify Youth at Risk of at Least Weekly Cannabis Use -- Neuro-symbolic Neurodegenerative Disease Modeling as Probabilistic Pro-grammed Deep Kernels.-Self-Disclosure in Opioid Use Recovery Forums -- Identifying Prepubertal Children with Risk for Suicide Using Deep Neural Network Trained on Multimodal Brain Imaging -- Improving Adverse Drug Event Extraction with SpanBERT on Different Text Typologies -- Machine Learning Identification of Self-Reported COVID-19 Symptoms from Tweets in Canada -- RRISK: Analyzing COVID-19 Risk in Food Establishments -- AWS CORD-19 Search: A Neural Search Engine for COVID-19 Literature -- Inferring COVID-19 Biological

Pathways from Clinical Phenotypes via Topological Analysis -- The EpiBench Platform to Propel AI/ML-based Epidemic Forecasting: A Prototype Demonstration Reaching Human Expert-level Performance -- Interpretable Classification of Human Exercise Videos through Pose Estimation and Multivariate Time Series Analysis -- Interpreting Deep Neural Networks for Medical Imaging using Concept Graphs -- Do Deep Neural Networks Forget Facial Action Units? - Exploring the Effects of Transfer Learning in Health Related Facial Expression Recognition -- Utilizing Predictive Analysis to Aid Emergency Medical Services -- Measuring Physiological Markers of Stress During Conversational Agent Interactions -- EvSys: A Relational Dynamic System for Sparse Irregular Clinical Events -- Predicting Patient Outcomes with Graph Representation Learning -- Patient-Specific Seizure Prediction Using Single Seizure Electroencephalography Recording -- Evaluation Metrics for Deep Learning Imputation Models -- Logistic Regression Is Also A Black Box. Machine Learning Can Help.

Sommario/riassunto

This book aims to highlight the latest achievements in the use of artificial intelligence for digital disease surveillance, pandemic intelligence, as well as public and clinical health surveillance. The edited book contains selected papers presented at the 2021 Health Intelligence workshop, co-located with the Association for the Advancement of Artificial Intelligence (AAAI) annual conference, and presents an overview of the issues, challenges, and potentials in the field, along with new research results. While disease surveillance has always been a crucial process, the recent global health crisis caused by COVID-19 has once again highlighted our dependence on intelligent surveillance infrastructures that provide support for making sound and timely decisions. This book provides information for researchers, students, industry professionals, and public health agencies interested in the applications of AI in population health and personalized medicine.
