Record Nr. UNINA9910522955603321 Hooper Jane <1981-> Autore **Titolo** Assessing COVID-19 and Other Pandemics and Epidemics using Computational Modelling and Data Analysis / / edited by Subhendu Kumar Pani, Sujata Dash, Wellington P. dos Santos, Syed Ahmad Chan Bukhari, Francesco Flammini Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2022 **ISBN** 3-030-79753-8 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (416 pages) Collana Computer Science Series Disciplina 006.3 Soggetti Artificial intelligence Quantitative research Cooperating objects (Computer systems) Internet of things Public health Diseases - Animal models Artificial Intelligence Data Analysis and Big Data Cyber-Physical Systems Internet of Things Public Health Disease Models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Chapter 1 Artificial Intelligence (AI) and Big Data Analytics for COVID-Nota di contenuto 19 Pandemic -- Chapter 2 COVID-19 TravelCover Post-lockdown Smart Transportation Management System for COVID-19 -- Chapter 3 Diverse techniques applied for effective diagnosis of COVID 19 --Chapter 4 A Review on Detection of Covid-19 Patients using Deep

Learning Techniques.-Chapter 5 Internet of Health Things (IoHT) for COVID 19 -- Chapter 6 Diagnosis for COVID-19 -- Chapter 7 IoT in Combating Covid 19 Pandemics Lessons for Developing Countries --

Chapter 8 Machine learning approaches for COVID 19 pandemic --Chapter 9 Smart sensing for COVID 19 Pandemic -- Chapter 10 eHealth, mHealth and Telemedicine for COVID-19 pandemic -- Chapter 11 Prediction of care for patients in a Covid-19 pandemic situation based on haematological parameters -- Chapter 12 Bioinformatics in Diagnosis of Covid-19 -- Chapter 13 Predicting the Covid-19 Morbidity Outspread and Mortality Using Deep Learning Techniques --Chapter 14 LSTM -CNN Deep learning Based Hybrid system for real time COVID-19 data analysis and prediction using Twitter data --Chapter 15 An intelligent tool to support diagnosis of Covid-19 by texture analysis of computerized tomography x-ray images and machine learning -- Chapter 16 Analysis of Blockchain Backed Covid19 Data -- Chapter 17 Intelligent systems for dengue, chikungunya and zika temporal and spatio-temporal forecasting a contribution and a brief review -- Chapter 18 Machine learning approaches for temporal and spatio-temporal Covid-19 forecasting a brief review and a contribution -- Chapter 19 Image Reconstruction for COVID-19 using Multi-frequency Electrical Impedance Tomography.

Sommario/riassunto

This book comprehensively covers the topic of COVID-19 and other pandemics and epidemics data analytics using computational modelling. Biomedical and Health Informatics is an emerging field of research at the intersection of information science, computer science, and health care. The new era of pandemics and epidemics bring tremendous opportunities and challenges due to the plentiful and easily available medical data allowing for further analysis. The aim of pandemics and epidemics research is to ensure high-quality, efficient healthcare, better treatment and quality of life by efficiently analyzing the abundant medical, and healthcare data including patient's data, electronic health records (EHRs) and lifestyle. Assessing COVID-19 and Other Pandemics and Epidemics using Computational Modelling and Data Analysis will play a vital role in improving human life in response to pandemics and epidemics. The state-of-the-art approaches for data mining-based medical and health related applications will be of great value to researchers and practitioners working in biomedical, health informatics, and artificial intelligence.