

1. Record Nr.	UNINA9910502987803321
Titolo	Applications of Artificial Intelligence in COVID-19 / / edited by Sachin Nandan Mohanty, Shailendra K. Saxena, Suneeta Satpathy, Jyotir Moy Chatterjee
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
ISBN	981-15-7317-4
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (593 pages)
Collana	Medical Virology: From Pathogenesis to Disease Control, , 2662-9828
Disciplina	610.285
Soggetti	Virology Epidemiology Artificial intelligence Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1. Comprehensive Claims of AI for Healthcare Applications- Coherence towards COVID-19 -- Chapter 2. Artificial Intelligence based systems for combating COVID-19 -- Chapter 3. Artificial intelligence mediated medical diagnosis of COVID-19 -- Chapter 4. AI combined with medical imaging enables rapid diagnosis for COVID-19 -- Chapter 5. Role of Artificial Intelligence in COVID-19 prediction based on Statistical Methods -- Chapter 6. Data Driven symptom Analysis and Location Prediction Model for Clinical Health Data Processing and Knowledgebase Development for COVID 19 -- Chapter 7. A decision support System using Rule based Expert System For COVID -19 Prediction and Diagnosis -- Chapter 8. A Predictive Mechanism to Intimate the Danger of Infection via nCOVID-19 through Unsupervised Learning -- Chapter 9. AI-enabled prognosis technologies for SARS Co-2. Chapter 10. Intelligent agent Based Case Base Reasoning Systems Build Knowledge Representation in COVID-19 analysis of Recovery, Infectious Patients -- Chapter 11. Epidemic Analysis of COVID 19 Using Machine Learning -- Chapter 12. Machine learning application in COVID-19 drug development -- Chapter 13. COVID 19 Epidemic Analysis Using Linear and Polynomial Regression Approach -- Chapter 14. Prediction & Analysis of outbreak of COVID-19 Pandemic

Using Machine Learning -- Chapter 15. Predictive Risk Analysis by using Machine Learning during Covid-19 -- Chapter 16. Analysis and Validation of Risk Prediction by Stochastic Gradient Boosting Along With Recursive Feature Elimination for COVID-19 -- Chapter 17. Artificial intelligence in mental healthcare during COVID-19 pandemic -- Chapter 18. Effect of Covid-19 on Autism Spectrum Disorder: Prognosis, diagnosis and therapeutics based On AI -- Chapter 19. Use of mobile phone apps for contact tracing to control the COVID-19 pandemic: A Literature Review -- Chapter 20. Role of IoT and Social Networking in Mental Healthcare of Transgender Community in Covid-19 Pandemic -- Chapter 21. TECHNOLOGY ACCEPTANCE AND USE OF IOT DURING COVID 19 PANDEMIC-CASE STUDY OF HEALTH SECTOR IN INDIA. Chapter 22. Artificial Intelligence – The Strategies used in COVID-19 for Diagnosis -- Chapter 23. Impact of Isolation and Quarantine on Covid-19 Patients and Potential Role of Technology in Mitigation -- Chapter 24. Impact of loneliness and Quarantine on COVID-19 patients with artificial intelligence applications -- Chapter 25. Can Technology fight the loneliness Lockdown: A study of factors Affecting Loneliness in NCR during COVID 19 -- Chapter 26. Psycho-economic Impact of Obligatory Job Switching during Covid-19 Pandemic: A Study of Hawkers in Bhubaneswar (India) -- Chapter 27. AI's Role in Essential Commodities during a Pandemic Situation -- Chapter 28. Impact of COVID-19 on Manufacturing and Operational Ecosystem in India -- Chapter 29. Impact of Repatriated Migrants on the Production Possibility of Agricultural Sector owing to Covid: A Study on the basis of Inferential Statistics -- Chapter 30. Nicotine in Covid-19: Friend or Foe";? -- Chapter 31. Artificial Intelligence in Covid'19: Application and Legal Conundrums.

Sommario/riassunto

The book examines the role of artificial intelligence during the COVID-19 pandemic, including its application in i) early warnings and alerts, ii) tracking and prediction, iii) data dashboards, iv) diagnosis and prognosis, v) treatments, and cures, and vi) social control. It explores the use of artificial intelligence in the context of population screening and assessing infection risks, and presents mathematical models for epidemic prediction of COVID-19. Furthermore, the book discusses artificial intelligence-mediated diagnosis, and how machine learning can help in the development of drugs to treat the disease. Lastly, it analyzes various artificial intelligence-based models to improve the critical care of COVID-19 patients.
