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Applications of Artificial Intelligence in COVID-19

Editors: Sachi Nandan Mohanty, Shailendra K. Saxena, Suneeta Satpathy, Jyotir Moy Chatterjee

Discusses the use of artificial intelligence-based tools in the diagnosis and treatment of COVID-19

Examines the application of artificial intelligence in epidemic analysis and drug development

Highlights the vital role of big data in the fight against coronavirus

Part of the book series: Medical Virology: From Pathogenesis to Disease Control (MVPDC)

Sections

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About this book

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.

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Keywords

Artificial Intelligence | Telemedicine | Predictive Analytics | COVID 19 | epidemiology

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