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   Nota di contenuto   Chapter 1. Data Analytics: COVID-19 Prediction using Multimodal Data
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                           Optimization -- Chapter 4. AI-Enabled Framework to Prevent COVID-
                           19 from Further Spreading -- Chapter 5. Artificial Intelligence Enabled
                           Robotic Drones for COVID-19 Outbreak -- Chapter 6. Understanding
                           and Analysis of Enhanced COVID-19 Chest X-Ray Images -- Chapter 7.
                           Deep Learning-based COVID-19 Diagnosis and Trend Predictions --
                           Chapter 8. COVID-19: Loose Ends -- Chapter 9. Social Distancing and
                           Artificial Intelligence- Understanding the Duality in the times of Covid-
                           19 -- Chapter 10. Post Covid-19 and Business Analytics.

Sommario/riassunto

This book discusses intelligent systems and methods to prevent further spread of COVID-19, including artificial intelligence, machine learning, computer vision, signal processing, pattern recognition, and robotics. It not only explores detection/screening of COVID-19 positive cases using one type of data, such as radiological imaging data, but also examines how data analytics-based tools can help predict/project future pandemics. In addition, it highlights various challenges and opportunities, like social distancing, and addresses issues such as data collection, privacy, and security, which affect the robustness of AI-driven tools. Also investigating data-analytics-based tools for projections using time series data, pattern analysis tools for unusual pattern discovery (anomaly detection) in image data, as well as AI-enabled robotics and its possible uses, the book will appeal to a broad readership, including academics, researchers and industry professionals.