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Descrizione fisica	1 online resource (476 pages)
Collana	Advanced Sciences and Technologies for Security Applications, , 2363-9466
Altri autori (Persone)	MichaelEdwin MasysAnthony J
Disciplina	006.3
Soggetti	Artificial intelligence Machine learning Public health Security systems Artificial Intelligence Machine Learning Public Health Security Science and Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Overview of Artificial Intelligence and Machine Learning for Public Health applications -- Vector borne disease: Seek and Destroy: Malaria eradication in East Africa using AI/ML/GIS -- Building a Public Health/ Global Health Intelligence capability -- Pandemic Planning: Digital Twins to support COVID-19 management -- Decision Support for Public/Global Health -- Mapping community vulnerability to disease outbreaks: hot spot and cold spot mapping -- Tech literacy for Public Health Professionals: insights into tech enabling the public health workforce -- Applying artificial intelligence to solve humanitarian crisis dilemmas -- Implementation Science: from design to impact- bringing AI/ML solutions -- Tech informed Global Health: considering and including the cultural and social implications -- FemTech: the intersection of technology and womans health.
Sommario/riassunto	This book explores innovative applications of artificial intelligence,

machine learning, and modeling to enhance public and global health security. It advocates for a shift from reactive to proactive management of health crises, emphasizing systems-based futures thinking and anticipatory scenarios. Highlighting the lessons from COVID-19, the book underscores the importance of tech-enabled solutions like large-scale simulations and advanced analytics for early detection and response to biological threats. It integrates insights from ecology, climate change, and multi-hazard events, aiming to balance disease control with societal well-being. Essential for public health researchers, policymakers, and national security experts, the book offers recommendations and roadmaps for future health crisis management.

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