

1. Record Nr.	UNINA9910427050003321
Titolo	AI and robotics in disaster studies // T. V. Vijay Kumar and Keshav Sud, editors
Pubbl/distr/stampa	Singapore : , : Palgrave Macmillan, , [2020] ©2020
ISBN	981-15-4291-0
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XIX, 263 p. 38 illus.)
Collana	Disaster Research and Management Series on the Global South
Disciplina	363.340284
Soggetti	Emergency management - Technological innovations Emergency management - Data processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Introduction: Enhancing Capacity to Manage Disasters -- Part I: New Technologies in Disaster Management -- 2. Artificial Intelligence and Early Warning Systems -- 3. Artificial Intelligence in Disaster Management -- 4. Optimal visual Cues for Smartphone Earthquake Alert Systems: Preliminary Data from Lab and Field Experiments -- 5. Using Artificial Intelligence and Social Media for Disaster Response and Management: An Overview -- 6. 'Internet of Things' Applications in Disaster Management -- 7. Samvad: Reaching Out Through Radio and Wireless Network -- 8. Usages of AI Technologies in Nepal's Disaster Management -- Part II: Government, Governance and Law -- 9. Enhancing Accountability and Triadic Collaboration in Disaster Governance of Sri Lanka -- 10. Artificial Intelligence and the Legal Response Paradigms in Disaster Management -- 11. Artificial Intelligence in Disaster Management in Sri Lanka: Problems and Prospects -- 12. Applications of Artificial Intelligence in Reconstruction Governance Lessons from Nepal Earthquakes -- 13. ICT Infrastructure of Disaster Management in India -- Part III: Building Community Resilience Through AI -- 14. Can Community Plans Really Talk? Integrating and Strengthening Communications Through Artificial Intelligence -- 15. The Challenge of Resilience in an Age of Artificial Intelligence -- 16. AI in an Urban Village in Delhi -- Part IV: Extraneous Influences and Ethics in AI Applications -- 17. Prevent AI from

Sommario/riassunto

The book promotes a meaningful and appropriate dialogue and cross-disciplinary partnerships on Artificial Intelligence (AI) in governance and disaster management. The frequency and the cost of losses and damages due to disasters are rising every year. From wildfires to tsunamis, drought to hurricanes, floods to landslides combined with chemical, nuclear and biological disasters of epidemic proportions has increased human vulnerability and ecosystem sustainability. Life is not as it used to be and governance to manage disasters cannot be a business as usual. The quantum and proportion of responsibilities with the emergency services has increased many times to strain them beyond their human capacities. It's time that the struggling disaster management services get supported and facilitated by new technology of combining AI and Machine Learning (ML) with Data Analytics Technologies (DAT) to serve people and government in disaster management. AI and ML have advanced to a state where they could be utilized for many operations in disaster risk reduction. Even though many disasters cannot be prevented and a number of them are blind natural disasters yet through an appropriate application of AI and ML quick predictions, vulnerability identification and classification of relief and rescue operations could be achieved. Prof. Dr T.V. Vijay Kumar is Professor and Dean, School of Computer and Systems Sciences, Jawaharlal Nehru University (JNU), Delhi, India. Dr Keshav Sud is currently working as Senior Manager of Data Science at Keurig Dr Pepper where he is leading the development of recommendation engines. Dr. Sud is a well-recognized expert in the field of AI with first authorship of numerous scholarly articles in internationally recognized professional publications.

---