

1. Record Nr.	UNISA996550559203316
Titolo	Applications for Artificial Intelligence and Digital Forensics in National Security [[electronic resource] /] / edited by Reza Montasari
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	3-031-40118-2
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (154 pages)
Collana	Advanced Sciences and Technologies for Security Applications, , 2363-9466
Disciplina	006.3
Soggetti	Artificial intelligence Data protection Computer crimes Security systems Artificial Intelligence Data and Information Security Cybercrime Security Science and Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Counter Terrorism and Unmanned Aerial Vehicle (UAV) Forensics: Investigative Process Based on the Case Study of DJI Mavic 2 Zoom -- 2. The Use of Machine Learning and Digital Forensics to Detect and Investigate Terrorist Content Online -- 3. Cell Site Analysis and ANPR Mapping -- 4. AI-Based Internet of Things Forensics -- 5. Digital Investigation of Timing-Based Side-Channel Attacks against IoT Devices and Proposed Countermeasures -- 6. Predictive Modelling: Forestalling Cyberterrorism Using Machine Learning -- 7. Policing Cyberspace and Big Data Predictive Analytics -- 8. Criminal Intelligence, Crime Pattern Analysis and Operational Policing -- 9. Enterprise Geographic Information System and Digital Policing -- 10. The Use of Artificial Intelligence in Managing Big Data Analysis Demands.
Sommario/riassunto	This book delivers insights into how social science and technology might aid new advancements in managing the complexity inherent

within national and international security landscape. The digital policing landscape is dynamic and intricate, emanating from crimes that are both persistent and transnational. Globalization, human and drug trafficking, cybercrime, terrorism, and other forms of transnational crime can have a significant impact on societies around the world. This necessitates a reassessment of what crime, national security, and policing mean. Recent global events such as human and drug trafficking, the COVID-19 pandemic, violent protests, cyber threats, and terrorist activities underline vulnerabilities residing in our current security and digital policing posture. As an interdisciplinary collection of studies, this book encapsulates concepts, theories, and technology applications, offering a comprehensive analysis of current and emerging trends and threats within the context of national and international security. Undertaking an evidence-based approach, this book offers an extraordinarily perceptive and detailed account of issues and solutions related to the complex national and international security landscape. To this end, the book: presents insights into emerging and potential technological and methodological solutions as well as advancements in relation to integrated computational and analytical solutions that could be deployed for the purposes of national and international security; provides a comprehensive analysis of technical, ethical, legal, privacy, and civil liberty challenges stemming from the aforementioned advancements; and, accordingly, offers detailed recommendations supporting the design and implementation of best practices including technical, ethical, and legal approaches for national and international security uses. The research contained in the book fits well into the larger body of work on various aspects of AI, cybersecurity, national security, digital forensics, cyberterrorism, ethics, human rights, cybercrime, and law. It provides a valuable reference for LEAs and security organizations, policymakers, cybersecurity experts, digital forensic practitioners, researchers, academicians, graduates and advanced undergraduates, and other stakeholders with an interest in national and global security.

---