Record Nr. UNINA9910855388003321 Autore Shandilya Shishir Kumar Titolo Digital Resilience: Navigating Disruption and Safeguarding Data Privacy // by Shishir Kumar Shandilya, Agni Datta, Yash Kartik, Atulya Nagar Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 9783031532900 [1st ed. 2024.] Edizione Descrizione fisica 1 online resource (573 pages) Collana EAI/Springer Innovations in Communication and Computing, , 2522-8609 Altri autori (Persone) DattaAgni KartikYash NagarAtulya Disciplina 621.382 Soggetti **Telecommunication** Cooperating objects (Computer systems) Security systems Communications Engineering, Networks Cyber-Physical Systems Security Science and Technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- Digital Resilience Preliminaries -- Navigating the Regulatory Landscape -- Fostering Resilience in Minors --Safeguarding the Digital Domain -- Exploring Real-World Scenarios --Thriving in the Quantum Era -- Research for a Resilient Future --Conclusion. Sommario/riassunto This book offers an in-depth overview of digital resilience, defined as the ability of individuals, organizations, and societies to adapt to and counter various digital threats such as cyberattacks, data breaches, and other forms of cyber threats. Digital resilience not only enables proactive measures but also ensures fault-tolerant planning and design. The book elaborates on the necessary techniques and methods to achieve digital resilience. Key methodologies, including quantum computing, post-quantum cryptography, nature-inspired cybersecurity,

zero-trust systems, zero-knowledge proofs, multi-party computation, and the emerging field of space security, are discussed in detail. The

book provides insights into artificial intelligence and machine learning, examining their impact on society and organizations. It critically analyses the role of cybersecurity in businesses, emphasizing its importance for safety and economic stability. In addition, the book discusses notable cyber incidents, offering valuable insights into digital resilience. It serves as a comprehensive compilation, featuring key terms, definitions, case studies, and references to existing literature and research in cybersecurity, analytics, information sciences, future computing, digital resilience, and related fields.