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| Descrizione fisica | 1 online resource (XI, 104 p. 59 illus.) |
| Disciplina | 621.3815 |
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| Lingua di pubblicazione | Inglese |
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| Note generali | Includes index. |
| Nota di contenuto | Chapter 1. Introduction to Cyber Security -- Chapter 2. Cryptography Concepts: Confidentiality -- Chapter 3. Cryptography Concepts: Integrity, Authentication, Availability, Access Control, Non-Repudiation -- Chapter 4. New Trends in Cryptography: Quantum, Blockchain, Lightweight, Chaotic and DNA Cryptography -- Chapter 5. Data Hiding: Steganography and Watermarking -- Chapter 6. Conclusions. |
| Sommario/riassunto | This book provides comprehensive coverage of various Cryptography topics, while highlighting the most recent trends such as quantum, blockchain, lightweight, Chaotic and DNA cryptography. Moreover, this book covers cryptography primitives and its usage and applications and focuses on the fundamental principles of modern cryptography such as Stream Ciphers, block ciphers, public key algorithms and digital signatures. Readers will gain a solid foundation in cryptography and security. This book presents the fundamental mathematical concepts of cryptography. Moreover, this book presents hiding data techniques such as steganography and watermarking. The author also provides a comparative study of the different cryptographic methods, which can be used to solve security problems. Provides an accessible, in-depth introduction to quantum, blockchain, lightweight, and Chaotic and DNA cryptography concepts; Discusses stream ciphers, block ciphers, public |

key algorithms and digital signatures; Explains how quantum cryptography uses physics to develop a cryptosystem; completely secure against being compromised without the knowledge of the sender or the receiver of the messages; Discusses Blockchain cryptography is a way to encapsulate transactions in the form of blocks where blocks are linked through the cryptographic hash, hence forming a chain of secured blocks.
