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Autore	Van Oorschot Paul C.
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Soggetti	Data protection Security systems Computer engineering Computer networks Telecommunication Application software Data and Information Security Security Science and Technology Computer Engineering and Networks Communications Engineering, Networks Computer and Information Systems Applications Protecció de dades Sistemes de seguretat Enginyeria de programari Telecomunicació Programari d'aplicació Seguretat informàtica Llibres electrònics
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Nota di contenuto	1. Security Concepts and Principles -- 2. Cryptographic Building Blocks -- 3. User Authentication—Passwords, Biometrics and Alternatives -- 4. Authentication Protocols and Key Establishment.-5. Operating System

Security and Access Control -- 6. Software Security—Exploits and Privilege Escalation -- 7. Malicious Software -- 8. Public-Key Certificate Management and Use Cases -- 9. Web and Browser Security -- 10. Firewalls and Tunnels -- 11. Intrusion Detection and Network-Based Attacks -- 12. Wireless LAN Security: 802.11 and Wi-Fi -- 13. Bitcoin, Blockchains and Ethereum -- Epilogue -- Index. .

Sommario/riassunto

Building on the core strengths of the inaugural book, this second edition of a uniquely accessible textbook provides a concise, yet comprehensive overview of computer and Internet security. It builds on the design principles to address security-related error patterns that have plagued software and system designs for more than 50 years. Computer Security and the Internet is “elementary” in that it assumes no background in security, but unlike “soft” high-level texts it does not avoid low-level details. The book reinforces fundamental academic concepts with examples and also relates these concepts to practical challenges and real-world incidents. Its overriding focus is brevity, without sacrificing breadth of core topics or technical detail within them; it designates selected content as optional to help readers prioritize topics. While knowledge of elementary operating-system and networking concepts is helpful, review sections summarize the essential background. Topics and features: Delivers comprehensive, technically sound explanations without burdening readers with mathematical proofs or lengthy source-code examples (NEW) adds chapter on wireless LAN security (Wi-Fi and 802.11) (NEW) adds chapter on Bitcoin and Ethereum, blockchains and cryptocurrencies Integrates inline exercises and supplemental per-chapter references and endnotes, bridging to further topics and serving as a springboard to research literature Dives selectively into fine points for exemplary topics to concretely illustrate concepts and principles Provides pointers to key surveys and relevant standards, including from the Internet Engineering Task Force and the U.S. National Institute of Standards and Technology Ideal for a one- or two-term introductory course for junior/senior undergraduate or first-year graduate students, this textbook/reference is also suitable for self-study by anyone seeking a solid footing in security, including software developers and computing professionals, technical managers, and government staff. Paul C. van Oorschot is a Professor of Computer Science at Carleton University (Ottawa), Canada Research Chair in Authentication and Computer Security, ACM Fellow, and IEEE Fellow. His earlier industrial career was in telecommunications and software security.
