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Titolo	Computer Networks [[electronic resource] ] : Data Communications, Internet and Security / / by Ata Elahi, Alex Cushman
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ISBN	3-031-42018-7
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (418 pages)
Disciplina	004.6
Soggetti	Telecommunication Computer networks Coding theory Information theory Communications Engineering, Networks Computer Communication Networks Coding and Information Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Introduction to Communications Networks -- Data Communications -- Communications Channels and Media -- Multiplexer and Switching Concepts -- Flow Control and Reliable Transmission -- Modulation, DSL, Cable Modem, and FTTH -- Ethernet and Fast Ethernet Technology -- Gigabit and 10 Gigabit Ethernet Technology -- LAN Interconnection Devices -- Internet Protocols Part I -- Internet Protocols Part II and MPLS -- Wireless Local Area Network (WLAN) -- Voice over Internet Protocols (Voice over IP) -- Introduction to Cryptography -- Network Security -- Conclusion.
Sommario/riassunto	The hands-on textbook covers both the theory and applications of data communications, the Internet, and network security technology, following the ACM guideline for courses in networking. The content is geared towards upper undergraduate and graduate students in information technology, communications engineering, and computer science. The book is divided into three sections: Data Communications, Internet Architecture, and Network Security. Topics covered include

flow control and reliable transmission; modulation, DSL, cable modem, and FTTH; Ethernet and Fast Ethernet; gigabit and 10 gigabit Ethernet; and LAN interconnection devices, among others. The book also covers emerging topics such as IPv6 and software defined networks. The book is accompanied with a lab manual which uses Wireshark, Cisco Packet Tracer, and virtual machines to lead students through simulated labs.

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