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Sommario/riassunto

Going beyond classic networking principles and architectures for better wireless performance Written by authors with vast experience in academia and industry, Wireless Mesh Networks provides its readers with a thorough overview and in-depth understanding of the state-of-the-art in wireless mesh networking. It offers guidance on how to develop new ideas to advance this technology, and how to support emerging applications and services. The contents of the book follow the TCP/IP protocol stack, starting from the physical layer. Functionalities and existing protocols and algorithms for each protocol layer are covered in depth. The book is written in an accessible textbook style, and contains supporting materials such as problems and exercises to assist learning. Key Features: *Presents an in-depth explanation of recent advances and open research issues in wireless mesh networking, and offers concrete and comprehensive material to guide deployment and product development *Describes system architectures and applications of wireless mesh networks (WMNs), and discusses the critical factors influencing protocol design *Explores theoretical network capacity and the state-of-the-art protocols related to WMNs *Surveys standards that have been specified and standard drafts that are being specified for WMNs, in particular the latest standardization results in IEEE 802.11s, 802.15.5, 802.16 mesh mode, and 802.16 relay mode *Includes an accompanying website with PPT-slides, further reading, tutorial material, exercises, and solutions Advanced students on networking, computer science, and electrical engineering courses will find Wireless Mesh Networks an essential read. It will also be of interest to wireless networking academics, researchers, and engineers at universities and in industry.