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Sommario/riassunto

This book aimed at bringing an insight to the ICN network, particularly various architectures, issues and challenges in the new networking paradigm. The book starts with an introduction to the new promising concept of ICN and its origin along with the reason behind this interesting innovation. Different architectures proposed so far in support of implementing the ICN is also discussed in details. Few of the challenges of ICN implementation are enlisted as caching, naming, routing, and security. Each of these challenges with recent development is covered in individual chapters. Moreover, integration of current trends in communication and computing like software defined networking and machine learning approach are another area that this book is focusing. All these chapters highlight the recent developments reported in the area and also discusses the future trends. The book provides an overview of the recent developments in future internet technologies, bringing together the advancements that have been made in ICN. The book includes three unique chapters in the field of ICN research. The first, is the SDN framework for implementing ICN by decoupling data and control plan. The machine learning models for predicting future trends in network traffic and other management activities is another important chapter. This chapter includes the possibilities of using machine learning models for trend prediction to help network administrators and service providers to take care of unexpected sudden change traffic pattern and user behaviour. The third most vital chapter is the security issues in ICN. This chapter includes various facts that influences the security of ICN. Issues involved in naming, caching and routing are discussed separately along with few recent works in these areas. Various types of attacks in ICN are also part of the discussion. The stated book would be useful for researchers in this area and will work as a reference for future work. Moreover, the content of the book would also be suitable as a supporting material for undergraduate and graduate level courses in computer science and electrical engineering.
