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Sommario/riassunto

This book looks at how quantum computing, neural networks, and next-generation communication systems can work together in new and exciting ways. The book presents details about cutting edge techniques, such as Tensor Networks and the n-Sci framework, that make 6G and 7G networks faster, safer, and able to grow. It has in-depth discussion on quantum-assisted channel estimates, energy-efficient designs, and ultra-reliable low-latency communication (URLLC), which makes it an important tool for wireless communication scholars and engineers. Some of the unique features are- in-depth case studies, real-life examples in smart cities and autonomous systems, and the use of graphs and tables to make complicated ideas easy to understand. Readers will learn a lot about how future communication will work and how quantum neural networks can be used to change the development of global wireless standards.