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Sommario/riassunto	"By increasing the density and number of different functionalities in wireless networks there is more and more need for the use of artificial intelligence for planning network deployment, running their optimization and dynamically controlling their operation. For example, machine learning algorithms are used for the prediction of traffic and network state in order to timely reserve resources for smooth communication with high reliability and low latency; Big data mining is used to predict customer behaviour and pre-distribute the information content across the network so that it can be efficiently delivered as soon as requested; Intelligent agents can search the internet on behalf of the customer in order to find the best options when it comes to buying any product online. This timely book presents a review of AI-based learning algorithms with a number of case studies supported by

Python and R programs, providing a discussion of the learning algorithms used in decision making based on game theory and a number of specific applications in wireless networks, such as channel, network state and traffic prediction. It is expected that once quantum computing becomes a commercial reality, it will be used in wireless communications systems in order to speed up specific processes due to its inherent parallelization capabilities. This is a practical book packed with case studies and follows a basic through to advanced level path and is an ideal course accompaniment for graduate/masters students, and online professional study."--