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Sommario/riassunto	Artificial neural networks are most suitable for solving problems that are complex, ill-defined, highly nonlinear, of many and different variables, and/or stochastic. Such problems are abundant in medicine, in finance, in security and beyond. This volume covers the basic theory and architecture of the major artificial neural networks. Uniquely, it presents 18 complete case studies of applications of neural networks in various fields, ranging from cell-shape classification to micro-trading in finance and to constellation recognition - all with their respective source codes. These case studies d