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	Sommario/riassunto	Drawing on the experience and knowledge of a practicing professional, this book provides a comprehensive introduction and practical guide to

the development, optimization, and application of artificial neural networks (ANNs) in modern environmental and biological analysis. Based on our knowledge of the functioning human brain, ANNs serve as a modern paradigm for computing. Presenting basic principles of ANNs together with simulated biological and environmental data sets and real applications in the field, this volume helps scientists comprehend the power of the ANN model to explain physical concepts and demonstrate complex natural processes--