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Sommario/riassunto	"This book explores novel graph classes and presents novel methods to classify networks. It particularly addresses the following problems: exploration of novel graph classes and their relationships among each other; existing and classical methods to analyze networks; novel graph similarity and graph classification techniques based on machine learning methods; and applications of graph classification and graph mining. Key topics are addressed in depth including the mathematical definition of novel graph classes, i.e. generalized trees and directed universal hierarchical graphs, and the application areas in which to apply graph classes to practical problems in computational biology, computer science, mathematics, mathematical psychology, etc"--