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Sommario/riassunto	Optimization is generally a reduction operation of a definite quantity. This process naturally takes place in our environment and through our activities. For example, many natural systems evolve, in order to minimize their potential energy. Modeling these phenomena then largely relies on our capacity to artificially reproduce these processes. In parallel, optimization problems have quickly emerged from human activities, notably from economic concerns. This book includes the most recent ideas coming from research and industry in the field of optimization, reliability and the recognition of a