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Soggetti	Mathematical optimization Industrial engineering Production engineering Optimization Industrial and Production Engineering
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Optimization is Ubiquitous -- 2. Linear Optimization -- 3. Mixed-Integer Linear Optimization -- 4. Nonlinear Optimization -- 5. Iterative Solution Algorithms for Nonlinear Optimization -- 6. Dynamic Optimization -- A. Taylor Approximations and Definite Matrices -- B. Convexity -- Index.
Sommario/riassunto	This textbook covers the fundamentals of optimization, including linear, mixed-integer linear, nonlinear, and dynamic optimization techniques, with a clear engineering focus. It carefully describes classical optimization models and algorithms using an engineering problem-solving perspective, and emphasizes modeling issues using many real-world examples related to a variety of application areas. Providing an appropriate blend of practical applications and optimization theory makes the text useful to both practitioners and students, and gives the reader a good sense of the power of optimization and the potential difficulties in applying optimization to modeling real-world systems. The book is intended for undergraduate and graduate-level teaching in industrial engineering and other engineering specialties. It is also of use to industry practitioners, due to

the inclusion of real-world applications, opening the door to advanced courses on both modeling and algorithm development within the industrial engineering and operations research fields.
