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Titolo	Linear and Integer Programming Made Easy // by T. C. Hu, Andrew B. Kahng
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Descrizione fisica	1 online resource (X, 143 p. 24 illus., 1 illus. in color.)
Disciplina	519.72
Soggetti	Electronic circuits Computer science—Mathematics Applied mathematics Engineering mathematics Circuits and Systems Math Applications in Computer Science Mathematical and Computational Engineering Applications of Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preliminaries -- Introduction -- Dimension of the Solution Space -- Introduction to the Simplex Method -- Duality and Complementary Slackness -- Revised Simplex Method -- Column Generating Technique -- The Knapsack Problem -- Asymptotic Algorithms -- The World Map of Integer Programs -- Linear and Integer Programming in Practice.
Sommario/riassunto	Linear and integer programming are fundamental toolkits for data and information science and technology, particularly in the context of today's megatrends toward statistical optimization, machine learning, and big data analytics. Drawn from over 30 years of classroom teaching and applied research experience, this textbook provides a crisp and practical introduction to the basics of linear and integer programming. The authors' approach is accessible to students from all fields of engineering, including operations research, statistics, machine learning, control system design, scheduling, formal verification, and computer vision. Readers will learn to cast hard combinatorial problems

as mathematical programming optimizations, understand how to achieve formulations where the objective and constraints are linear, choose appropriate solution methods, and interpret results appropriately. •Provides a concise introduction to linear and integer programming, appropriate for undergraduates, graduates, a short course or boot camp, or self-learning; •Targets not only computer scientists and engineers, but those in management science and operations research as well; •Emphasizes basics and intuitive concepts, and gives corresponding numerical examples; •Includes exercises to test and reinforce the concepts introduced, along with a website containing additional material matched to the book's contents.
