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Nota di contenuto	Introduction -- Continuous Optimization -- Linear Programming and the Simplex Method -- Variational Methods -- Correspondence Problems -- Graph Cuts -- Dynamic Programming.
Sommario/riassunto	Optimization plays an invaluable role in the exciting and rapidly developing field of computer vision, yet this importance is often overlooked in the literature. This practical and authoritative text/reference presents a broad introduction to the optimization methods used specifically in computer vision. In order to facilitate understanding, the presentation of the methods is supplemented by simple flow charts, followed by pseudocode implementations that reveal deeper insights into their mode of operation. These discussions are further supported by examples taken from important applications in computer vision. Topics and features: Provides a comprehensive overview of computer vision-related optimization Covers a range of techniques from classical iterative multidimensional optimization to cutting-edge topics of graph cuts and GPU-suited total variation-based optimization Describes in detail the optimization methods employed in computer vision applications Illuminates key concepts with clearly written and step-by-step explanations Presents detailed information on implementation, including pseudocode for most methods This easy-to-follow and applications-focused book is an essential resource for researchers and practitioners seeking guidance on implementing specific methods in computer vision. Marco Alexander Treiber is a

software developer at ASM Assembly Systems, Munich, Germany, where he is Technical Lead in Image Processing for the Vision System of SiPlace placement machines, used in SMT assembly. Among his other publications is the successful Springer title An Introduction to Object Recognition.