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Titolo	Partitional Clustering via Nonsmooth Optimization : Clustering via Optimization / / by Adil M. Bagirov, Napsu Karmitsa, Sona Taheri
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Descrizione fisica	1 online resource (XX, 336 p. 78 illus., 77 illus. in color.)
Collana	Unsupervised and Semi-Supervised Learning, , 2522-848X
Disciplina	515.64
Soggetti	Electrical engineering Pattern perception Signal processing Image processing Speech processing systems Artificial intelligence Data mining Communications Engineering, Networks Pattern Recognition Signal, Image and Speech Processing Artificial Intelligence Data Mining and Knowledge Discovery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Introduction to Clustering -- Clustering Algorithms -- Nonsmooth Optimization Models in Cluster Analysis -- Nonsmooth Optimization -- Optimization based Clustering Algorithms -- Implementation and Numerical Results -- Conclusion.
Sommario/riassunto	This book describes optimization models of clustering problems and clustering algorithms based on optimization techniques, including their implementation, evaluation, and applications. The book gives a comprehensive and detailed description of optimization approaches for solving clustering problems; the authors' emphasis on clustering

algorithms is based on deterministic methods of optimization. The book also includes results on real-time clustering algorithms based on optimization techniques, addresses implementation issues of these clustering algorithms, and discusses new challenges arising from big data. The book is ideal for anyone teaching or learning clustering algorithms. It provides an accessible introduction to the eld and it is well suited for practitioners already familiar with the basics of optimization. Provides a comprehensive description of clustering algorithms based on nonsmooth and global optimization techniques Addresses problems of real-time clustering in large data sets and challenges arising from big data Describes implementation and evaluation of optimization based clustering algorithms.