

1. Record Nr.	UNINA9910983338603321
Autore	Bagrov Adil
Titolo	Partitional Clustering via Nonsmooth Optimization : Clustering via Optimization / / by Adil Bagirov, Napsu Karimitsa, Sona Taheri
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	9783031765124 3031765125
Edizione	[2nd ed. 2025.]
Descrizione fisica	1 online resource (402 pages)
Collana	Unsupervised and Semi-Supervised Learning, , 2522-8498
Altri autori (Persone)	KarimitsaNapsu TaheriSona
Disciplina	621.382
Soggetti	Telecommunication Pattern recognition systems Signal processing Artificial intelligence Data mining Communications Engineering, Networks Automated Pattern Recognition Signal, Speech and Image Processing Artificial Intelligence Data Mining and Knowledge Discovery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
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 updated 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 very large data and data with noise and outliers. The book is ideal for anyone teaching or learning clustering algorithms. It provides an accessible introduction to the field and it is well suited for practitioners already familiar with the basics of optimization. Designed for a typical undergraduate, graduate, or dual-listed course with a semester-based calendar; Puts theory in context, so readers gain knowledge about the most essential concepts and algorithms; Covers essential terms, algorithms, and useful tools for learning and performing contemporary AI.

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