

1. Record Nr.	UNINA9910299469003321
Titolo	Subspace Methods for Pattern Recognition in Intelligent Environment // edited by Yen-Wei Chen, Lakhmi C. Jain
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-642-54851-2
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (XVI, 199 p. 99 illus., 52 illus. in color.)
Collana	Studies in Computational Intelligence, , 1860-949X ; ; 552
Disciplina	519
Soggetti	Applied mathematics Engineering mathematics Artificial intelligence Pattern recognition Mathematical and Computational Engineering Artificial Intelligence Pattern Recognition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Active Shape Model and Its Application to Face Alignment -- Condition Relaxation in Conditional Statistical Shape Models -- Independent Component Analysis and Its Application to Classification of High-Resolution Remote Sensing Images -- Subspace Construction from Artificially Generated Images for Traffic Sign Recognition -- Local Structure Preserving based Subspace Analysis Methods and Applications -- Sparse Representation for Image Super-Resolution -- Sampling and Recovery of Continuously-Defined Sparse Signals and Its Applications -- Tensor-Based Subspace Learning for Multi-Pose Face Synthesis.
Sommario/riassunto	This research book provides a comprehensive overview of the state-of-the-art subspace learning methods for pattern recognition in intelligent environment. With the fast development of internet and computer technologies, the amount of available data is rapidly increasing in our daily life. How to extract core information or useful features is an important issue. Subspace methods are widely used for dimension

reduction and feature extraction in pattern recognition. They transform a high-dimensional data to a lower-dimensional space (subspace), where most information is retained. The book covers a broad spectrum of subspace methods including linear, nonlinear and multilinear subspace learning methods and applications. The applications include face alignment, face recognition, medical image analysis, remote sensing image classification, traffic sign recognition, image clustering, super resolution, edge detection, multi-view facial image synthesis.
