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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Face Recognition I -- An Incremental Learning Algorithm for Face Recognition -- Face Recognition Based on ICA Combined with FLD -- Understanding Iconic Image-Based Face Biometrics -- Fusion of LDA and PCA for Face Verification -- Fingerprint Recognition -- Complex Filters Applied to Fingerprint Images Detecting Prominent Symmetry Points Used for Alignment -- Fingerprint Matching Using Feature Space Correlation -- Fingerprint Minutiae: A Constructive Definition -- Psychology and Biometrics -- Pseudo-entropy Similarity for Human Biometrics -- Mental Characteristics of Person as Basic Biometrics --

Face Detection and Localization -- Detection of Frontal Faces in Video Streams -- Genetic Model Optimization for Hausdorff Distance-Based Face Localization -- Coarse to Fine Face Detection Based on Skin Color Adaption -- Face Recognition II -- Robust Face Recognition Using Dynamic Space Warping -- Subspace Classification for Face Recognition -- Gait and Signature Analysis -- Gait Appearance for Recognition -- View-invariant Estimation of Height and Stride for Gait Recognition -- Improvement of On-line Signature Verification System Robust to Intersession Variability -- Classifiers for Recognition -- Biometric Identification in Forensic Cases According to the Bayesian Approach -- A New Quadratic Classifier Applied to Biometric Recognition.

Sommario/riassunto	Biometric authentication refers to identifying an individual based on his or her distinguishing physiological and/or behavioral characteristics. It associates an individual with a previously determined identity based on that individual s appearance or behavior. Because many physiological or behavioral characteristics (biometric indicators) are distinctive to each person, biometric identifiers are inherently more reliable and more capable than knowledge-based (e.g., password) and token-based (e.g., a key) techniques in differentiating between an authorized person and a fraudulent impostor. For this reason, more and more organizations are looking to automated identity authentication systems to improve customer satisfaction, security, and operating efficiency as well as to save critical resources. Biometric authentication is a challenging pattern recognition problem; it involves more than just template matching. The intrinsic nature of biometric data must be carefully studied, analyzed, and its properties taken into account in developing suitable representation and matching algorithms. The intrinsic variability of data with time and environmental conditions, the social acceptability and invasiveness of acquisition devices, and the facility with which the data can be counterfeited must be considered in the choice of a biometric indicator for a given application. In order to deploy a biometric authentication system, one must consider its reliability, accuracy, applicability, and efficiency. Eventually, it may be necessary to combine several biometric indicators (multimodal-biometrics) to cope with the drawbacks of the individual biometric indicators.