

Advances in biometrics : sensors, algorithms and systems /

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Monografía

Biometrics technology continues to stride forward with its wider acceptance and its real need in various new security facets of modern society. From simply logging on to a laptop to crossing the border of a country, biometrics is being called upon to meet the growing challenges of identity management. With contributions from academia and industry by leading international authorities in the field, this unique book presents a comprehensive treatment of biometrics and offers coverage of the entire gamut of topics in the field, including data acquisition, pattern-matching algorithms, and issues that impact at the system level, such as standards, security, networks, and databases. It has been organized under three sections: sensors, advances in biometric matching algorithms, and topics that deal with issues at the systems level. Key features: " Includes new algorithmic advances, including physiological biometrics (face from video, iris at a distance) and behavioral (handwriting, voice) and a strikingly novel modality in headprint biometrics " Contains new modalities for research, such as infrared and multispectral imaging "Presents several chapters on the much overlooked area relating to the sensors themselves for the various biometric modalities " Emphasizes the advances and cuttingedge technologies throughout "Discusses systems level both from a human-factors point of view and the perspective of networking, databases, privacy and anti-spoofing "Incorporates chapters devoted to touchless image capture, ultrasonic imaging and swipe methods Written for researchers and advanced students, this much needed concise volume is an ideal tool to use as a ready reference and captures the very latest in state-of-the-art research, providing readers with a broader and deeper understanding of the topic. Dr Nalini K. Ratha is a Research Staff Member at the IBM Thomas J. Watson Research Center, New York. He co-edited the successful Automatic Fingerprint Recognition Systems and also co-authored A Guide to Biometrics Selection and System Design Professor Venu Govindaraju is Director at the Center for Unified Biometrics and Sensors (CUBS), University at Buffalo, State University of New York

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