Record Nr. UNINA9910298963303321 Adaptive Biometric Systems: Recent Advances and Challenges // **Titolo** edited by Ajita Rattani, Fabio Roli, Eric Granger Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-24865-0 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (141 p.) Collana Advances in Computer Vision and Pattern Recognition, , 2191-6586 Disciplina 006.4 Soggetti Biometrics (Biology) Pattern recognition Signal processing Image processing Speech processing systems Artificial intelligence **Biometrics** Pattern Recognition Signal, Image and Speech Processing Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Sommario/riassunto This timely and interdisciplinary volume presents a detailed overview of the latest advances and challenges remaining in the field of adaptive biometric systems. A broad range of techniques are provided from an international selection of pre-eminent authorities, collected together under a unified taxonomy and designed to be applicable to any pattern recognition system. Topics and features: Presents a thorough

> introduction to the concept of adaptive biometric systems, detailing their taxonomy, levels of adaptation, and open issues and challenges Reviews systems for adaptive face recognition that perform self-

updating of facial models using operational (unlabeled) data Describes a novel semi-supervised training strategy known as fusion-based co-

training Examines the characterization and recognition of human gestures in videos Discusses a selection of learning techniques that can be applied to build an adaptive biometric system Investigates procedures for handling temporal variance in facial biometrics due to aging Proposes a score-level fusion scheme for an adaptive multimodal biometric system This comprehensive text/reference will be of great interest to researchers and practitioners engaged in systems science, information security or biometrics. Postgraduate and final-year undergraduate students of computer engineering will also appreciate the coverage of intelligent and adaptive schemes for cutting-edge pattern recognition and signal processing in changing environments.