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Nota di contenuto	Introduction -- Part I – New Methods in Biometrics -- Deep Biometrics: A Robust Approach to Biometrics in Big Data Issues -- Deep Fusion of Multimodal Biometrics -- Deep Fuzzy Logic for Precise Biometric Systems -- Hierarchical Biometric Verification with Deep Sparse Features -- GAN-based Deep Biometric Verification -- Part II – New Advances in Deep Biometrics -- Deep Paleographic Handwriting Analysis for Author Identification -- Deep Palmprints versus Fingerprints: Rivals or Friends? -- A Survey on Deep Soft Biometrics for Forensic Analysis -- Robust Biometric Verification with Low Quality Data -- Deep Solution for Biometric Big Data -- Deep Privacy in Biometric -- Part III – New Biometric Applications using Deep Learning -- Biometric Key Generation via Deep Learning for Mobile Banking -- Securing Electronic Medical Records Using Deep Biometric Authentication -- Deep Body Biometrics from MRI Images for Medicine Advice -- Deep Social Identity in Social Network -- Deep Cognition in

Robotic Biometrics -- Conclusion.

Sommario/riassunto

This book highlights new advances in biometrics using deep learning toward deeper and wider background, deeming it “Deep Biometrics”. The book aims to highlight recent developments in biometrics using semi-supervised and unsupervised methods such as Deep Neural Networks, Deep Stacked Autoencoder, Convolutional Neural Networks, Generative Adversary Networks, and so on. The contributors demonstrate the power of deep learning techniques in the emerging new areas such as privacy and security issues, cancellable biometrics, soft biometrics, smart cities, big biometric data, biometric banking, medical biometrics, healthcare biometrics, and biometric genetics, etc. The goal of this volume is to summarize the recent advances in using Deep Learning in the area of biometric security and privacy toward deeper and wider applications. Highlights the impact of deep learning over the field of biometrics in a wide area; Exploits the deeper and wider background of biometrics, suchas privacy versus security, biometric big data, biometric genetics, and biometric diagnosis, etc.; Introduces new biometric applications such as biometric banking, internet of things, cloud computing, and medical biometrics.