Record Nr. UNINA9910349270803321 Autore Stojanovi Branka Titolo Segmentation and Separation of Overlapped Latent Fingerprints: Algorithms, Techniques, and Datasets / / by Branka Stojanovi, Oge Marques, Aleksandar Neškovi Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 3-030-23364-2 ISBN Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (61 pages) Collana SpringerBriefs in Computer Science, , 2191-5768 Disciplina 006.3 006.4 Soggetti Biometrics (Biology) Artificial intelligence **Biometrics** Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico 1 Latent fingerprint matching systems -- 2 Latent fingerprint datasets Nota di contenuto -- 3 Overlapped latent fingerprints segmentation: problem definition -- 4 Machine learning based segmentation of overlapped latent fingerprints -- 5 Overlapped latent fingerprints separation: problem definition -- 6 Machine learning based separation of overlapped latent fingerprints. Sommario/riassunto This Springerbrief presents an overview of problems and technologies behind segmentation and separation of overlapped latent fingerprints. which are two fundamental steps in the context of fingerprint matching systems. It addresses five main aspects: (1) the need for overlapped latent fingerprint segmentation and separation in the context of fingerprint verification systems; (2) the different datasets available for research on overlapped latent fingerprints; (3) selected algorithms and techniques for segmentation of overlapped latent fingerprints; (4) selected algorithms and techniques for separation of overlapped latent fingerprints; and (5) the use of deep learning techniques for segmentation and separation of overlapped latent fingerprints. By

offering a structured overview of the most important approaches currently available, putting them in perspective, and suggesting numerous resources for further exploration, this book gives its readers a clear path for learning new topics and engaging in related research. Written from a technical perspective, and yet using language and terminology accessible to non-experts, it describes the technologies, introduces relevant datasets, highlights the most important research results in each area, and outlines the most challenging open research questions. This Springerbrief targets researchers, professionals and advanced-level students studying and working in computer science, who are interested in the field of fingerprint matching and biometrics. Readers who want to deepen their understanding of specific topics will find more than one hundred references to additional sources of related information.