1. Record Nr. UNISA996465463203316 Autore Li Yi Titolo Heterogeneous Facial Analysis and Synthesis [[electronic resource] /] / by Yi Li, Huaibo Huang, Ran He, Tieniu Tan Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020 Pubbl/distr/stampa 981-13-9148-3 **ISBN** Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (104 pages) Collana SpringerBriefs in Computer Science, , 2191-5768 Disciplina 006.37 Soggetti Optical data processing Pattern recognition Machine learning Image Processing and Computer Vision Pattern Recognition Machine Learning Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia 1. Introduction -- 2. Foundation -- 3. Unconditional Image Generation Nota di contenuto -- 4. Cross-spectral hallucination -- 5. Cosmetic Transfer -- 6. Face Super Resolution -- 7. Face Rotation -- 8. Expression Synthesis -- 9. Face Completion -- 10. Suggestions. This book presents a comprehensive review of heterogeneous face Sommario/riassunto analysis and synthesis, ranging from the theoretical and technical foundations to various hot and emerging applications, such as cosmetic transfer, cross-spectral hallucination and face rotation. Deep generative models have been at the forefront of research on artificial intelligence in recent years and have enhanced many heterogeneous face analysis tasks. Not only has there been a constantly growing flow of related research papers, but there have also been substantial advances in real-world applications. Bringing these together, this book describes both the fundamentals and applications of heterogeneous

face analysis and synthesis. Moreover, it discusses the strengths and weaknesses of related methods and outlines future trends. Offering a rich blend of theory and practice, the book represents a valuable resource for students, researchers and practitioners who need to

construct face analysis systems with deep generative networks.	