Record Nr. UNINA9910826537403321 Autore Daoudi Mohamed <1964-> Titolo 3D face modeling, analysis, and recognition / / Mohamed Daoudi, Anuj Srivastava, Remco Veltkamp Singapore, : Wiley, 2013 Pubbl/distr/stampa **ISBN** 9781118592632 1118592638 9781118592656 1118592654 9781118592649 1118592646 Edizione [1st ed.] Descrizione fisica 1 online resource (221 p.) SrivastavaAnuj <1968-> Altri autori (Persone) VeltkampRemco C. <1963-> Disciplina 006.6/93 Soggetti Face - Computer simulation Human face recognition (Computer science) Three-dimensional imaging Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. 3D FACE MODELING, ANALYSIS AND RECOGNITION: Contents: Preface: Nota di contenuto List of Contributors; 1 3D Face Modeling; 1.1 Challenges and Taxonomy of Techniques; 1.2 Background; 1.2.1 Depth from Triangulation; 1.2.2 Shape from Shading; 1.2.3 Depth from Time of Flight (ToF); 1.3 Static 3D Face Modeling; 1.3.1 Laser-stripe Scanning; 1.3.2 Time-coded Structured Light; 1.3.3 Multiview Static Reconstruction; 1.4 Dynamic 3D Face Reconstruction; 1.4.1 Multiview Dynamic Reconstruction; 1.4.2 Photometric Stereo; 1.4.3 Structured Light; 1.4.4 Spacetime Faces; 1.4.5 Template-based Post-processing 1.5 Summary and ConclusionsExercises; References; 2 3D Face Surface Analysis and Recognition Based on Facial Surface Features; 2.1 Geometry of 3D Facial Surface; 2.1.1 Primary 3D Surface Representations; 2.1.2 Rigid 3D Transformations; 2.1.3 Decimation of

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Sommario/riassunto

3D Face Modeling, Analysis and Recognition presents methodologies for analyzing shapes of facial surfaces, develops computational tools for analyzing 3D face data, and illustrates them using state-of-the-art applications. The methodologies chosen are based on efficient representations, metrics, comparisons, and classifications of features that are especially relevant in the context of 3D measurements of human faces. These frameworks have a long-term utility in face analysis, taking into account the anticipated improvements in data collection, data storage, processing speeds, and appl