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Titolo	Human Emotion Recognition from Face Images // by Paramartha Dutta, Asit Barman
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ISBN	981-15-3883-2
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XIX, 264 p. 112 illus., 99 illus. in color.)
Collana	Cognitive Intelligence and Robotics, , 2520-1956
Disciplina	006.37
Soggetti	User interfaces (Computer systems) Optical data processing Pattern perception User Interfaces and Human Computer Interaction Image Processing and Computer Vision Pattern Recognition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Distance Signature for Recognizing Human Emotions -- Shape Signature for recognizing Human Emotion -- Distance Shape Signature Duo Ford Determination of Human Emotion -- Distance Texture Signature Duo for Determination of Human Emotion.
Sommario/riassunto	This book discusses human emotion recognition from face images using different modalities, highlighting key topics in facial expression recognition, such as the grid formation, distance signature, shape signature, texture signature, feature selection, classifier design, and the combination of signatures to improve emotion recognition. The book explains how six basic human emotions can be recognized in various face images of the same person, as well as those available from benchmark face image databases like CK+, JAFFE, MMI, and MUG. The authors present the concept of signatures for different characteristics such as distance and shape texture, and describe the use of associated stability indices as features, supplementing the feature set with statistical parameters such as range, skewedness, kurtosis, and entropy. In addition, they demonstrate that experiments with such feature choices offer impressive results, and that performance can be

further improved by combining the signatures rather than using them individually. There is an increasing demand for emotion recognition in diverse fields, including psychotherapy, biomedicine, and security in government, public and private agencies. This book offers a valuable resource for researchers working in these areas.

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