1. Record Nr. UNINA9910971502403321

Titolo	Rough fuzzy image analysis : foundations and methodologies / / edited by Sankar K. Pal, James F. Peters
Pubbl/distr/stampa	Boca Raton, : Taylor & Francis, 2010
ISBN	9786612902581 9781040212325 1040212328 9780429165863 0429165862 9781138116238 1138116238 9781282902589 128290258X 9781439803301 1439803307
Edizione	[1st ed.]
Descrizione fisica	1 online resource (259 p.)
Collana	Chapman & Hall/CRC Mathematical and Computational Imaging ; ; v.v. 1
Altri autori (Persone)	PalSankar K PetersJames F
Disciplina	621.36/7
Soggetti	Image analysis Fuzzy sets
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A CRC title."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Title; Copyright; Preface; Table of Contents; 1 Cantor, Fuzzy, Near, and Rough Sets in Image Analysis; 2 Rough-Fuzzy Clustering Algorithm for Segmentation of Brain MR Images; 3 Image Thresholding using Generalized Rough Sets; 4 Mathematical Morphology and Rough Sets; 5 Rough Hybrid Scheme: An application of breast cancer imaging; 6 Applications of Fuzzy Rule-based Systems in Medical Image Understanding; 7 Near Set Evaluation And Recognition (NEAR) System; 8 Perceptual Systems Approach to Measuring Image Resemblance; 9 From Tolerance Near Sets to Perceptual Image Analysis

	10 Image Segmentation: A Rough-set Theoretic Approach11 Rough Fuzzy Measures in Image Segmentation and Analysis; 12 Discovering Image Similarities. Tolerance Near Set Approach; Index
Sommario/riassunto	Fuzzy sets, near sets, and rough sets are useful and important stepping stones in a variety of approaches to image analysis. These three types of sets and their various hybridizations provide powerful frameworks for image analysis. Emphasizing the utility of fuzzy, near, and rough sets in image analysis, ""Rough Fuzzy Image Analysis: Foundations and Methodologies"" introduces the fundamentals and applications in the state of the art of rough fuzzy image analysis. In the first chapter, the distinguished editors explain how fuzzy, near, and rough sets provide the basis for the stages of pictoria