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	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Part I: Existing Models and Algorithms for Image Texture -- Image Texture, Texture Features, and Image Texture Classification and Segmentation -- Texture Features and Image Texture Models -- Algorithms for Image Texture Classification -- Dimensionality Reduction and Sparse Representation -- Part II: The K-Views Models and Algorithms -- Basic Concept and Models of the K-Views -- Using Datagram in the K-Views Model -- Features-Based K-Views Model -- Advanced K-Views Algorithms -- Part III: Deep Machine Learning Models for Image Texture Analysis -- Foundations of Deep Machine Learning in Neural Networks -- Convolutional Neural Networks and Texture Classification.
	Sommario/riassunto	This useful textbook/reference presents an accessible primer on the fundamentals of image texture analysis, as well as an introduction to the K-views model for extracting and classifying image textures. Divided into three parts, the book opens with a review of existing models and algorithms for image texture analysis, before delving into the details of the K-views model. The work then concludes with a discussion of popular deep learning methods for image texture

analysis. Topics and features: Provides self-test exercises in every chapter Describes the basics of image texture, texture features, and image texture classification and segmentation Examines a selection of widely-used methods for measuring and extracting texture features, and various algorithms for texture classification Explains the concepts of dimensionality reduction and sparse representation Discusses view-based approaches to classifying images Introduces the template for the K-views algorithm, as well as a range of variants of this algorithm Reviews several neural network models for deep machine learning, and presents a specific focus on convolutional neural networks This introductory text on image texture analysis is ideally suitable for senior undergraduate and first-year graduate students of computer science, who will benefit from the numerous clarifying examples provided throughout the work. Dr. Chih-Cheng Hung is a Tenured Professor of Computer Science in the College of Computing and Software Engineering at Kennesaw State University, where he serves as the Director of the Center for Machine Vision and Security Research. He also holds the position of YinDu Scholar at Anyang Normal University, China. Dr. Enmin Song is a Professor and Director of the Department of Computer Science and Application at Huazhong University of Science and Technology, Wuhan, China. Dr. Yihua Lan is an Associate Professor of Computer Science in the School of Computer and Information Technology at Nanyang Normal University, China.