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Titolo	Image Processing with Python : Theory, Practice, and Applications // by Erik Cuevas, Alma Nayeli Rodriguez-Vazquez, Beatriz A. Rivera-Aguilar, Jesús A. López-Luquín, Carlos Guzmán-Rosales
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Descrizione fisica	1 online resource (224 pages)
Collana	Signals and Communication Technology, , 1860-4870
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Soggetti	Signal processing Computer vision Telecommunication Signal, Speech and Image Processing Computer Vision Communications Engineering, Networks
Lingua di pubblicazione	Inglese
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Nota di contenuto	Introduction -- Vision and Image Processing System -- Pixel Operations -- Spatial Filters -- Edges and Contours -- Corner Determination -- Detection of Lines and Curves -- Morphological Operations -- Conclusion.
Sommario/riassunto	This book provides a comprehensive material tailored for students and professionals studying image processing. Designed to support both theoretical learning and practical implementation, the book covers a broad spectrum of essential topics in the field. These include foundational concepts such as pixel-level operations and geometric transformations, as well as advanced techniques like spatial filtering, image segmentation, edge detection, and color image processing. By integrating detailed explanations with practical examples, the book aims to equip readers with a deep understanding of image processing methods and their real-world applications, making it an invaluable guide for mastering the subject. Written with a teaching perspective, this book is designed to serve as a comprehensive textbook for undergraduate and postgraduate students specializing in Science,

Electrical Engineering, or Computational Mathematics. Provides comprehensive coverage of theory and hands-on Python-based image processing techniques; Includes concepts such as pixel-level operations, geometric transformations, spatial filtering, and edge detection; Features a computational focus, ensuring an intuitive and hands-on learning experience.
