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Autore	Sundararajan D
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Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Image Enhancement in the Spatial Domain -- Chapter 3. Fourier Analysis -- Chapter 4. Image Enhancement in the Frequency Domain -- Chapter 5. Image Restoration -- Chapter 6. Geometric Transformations and Image Registration -- Chapter 7. Image Reconstruction from Projections -- Chapter 8. Morphological Image Processing -- Chapter 9. Edge Detection -- Chapter 10. Segmentation -- Chapter 11. Object Description -- Chapter 12. Object Classification -- Chapter 13. Image Compression -- Chapter 14. Color Image Processing.

Sommario/riassunto

This book offers readers an essential introduction to the fundamentals of digital image processing. Pursuing a signal processing and algorithmic approach, it makes the fundamentals of digital image processing accessible and easy to learn. It is written in a clear and concise manner with a large number of 4 x 4 and 8 x 8 examples, figures and detailed explanations. Each concept is developed from the basic principles and described in detail with equal emphasis on theory and practice. The book is accompanied by a companion website that provides several MATLAB programs for the implementation of image processing algorithms. The book also offers comprehensive coverage of the following topics: Enhancement, Transform processing, Restoration, Registration, Reconstruction from projections, Morphological image processing, Edge detection, Object representation and classification, Compression, and Color processing.
