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Nota di contenuto	Digital Color Image Processing; TABLE OF CONTENTS; Preface; Acknowledgment; 1 Introduction; 1.1 Goal and Content of this Book; 1.2 Terminology in Color Image Processing; 1.2.1 What Is a Digital Color Image?; 1.2.2 Derivative of a Color Image; 1.2.3 Color Edges; 1.2.4 Color Constancy; 1.2.5 Contrast of a Color Image; 1.2.6 Noise in Color Images; 1.2.7 Luminance, Illuminance, and Brightness; 1.3 Color Image Analysis in Practical Use; 1.3.1 Color Image Processing in Medical Applications; 1.3.2 Color Image Processing in Food Science and Agriculture 1.3.3 Color Image Processing in Industrial Manufacturing and Nondestructive Materials Testing1.3.4 Additional Applications of Color Image Processing; 1.3.5 Digital Video and Image Databases; 1.4 Further Reading; 1.5 References; 2 Eye and Color; 2.1 Physiology of Color Vision; 2.2 Receptor Color Information; 2.3 Postreceptor Color Information; 2.3.1 Neurophysiology of Retinal Ganglia Cells; 2.3.2 Reaction of Retinal Ganglia Cells to Colored Light Stimuli; 2.4 Cortical Color Information; 2.5 Color Constant Perception and Retinex Theory; 2.6 References; 3 Color Spaces and Color Distances

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Sommario/riassunto

An introduction to color in three-dimensional image processing and the emerging area of multi-spectral image processing The importance of color information in digital image processing is greater than ever. However, the transition from scalar to vector-valued image functions has not yet been generally covered in most textbooks. Now, Digital Color Image Processing fills this pressing need with a detailed introduction to this important topic. In four comprehensive sections, this book covers: The fundamentals and requirements for color image processing from a vector-valued viewpoint<