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Autore	Burger Wilhelm
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Automatic Thresholding -- Filters for Color Images -- Edge Detection in Color Images -- Edge-Preserving Smoothing Filters -- Fourier Shape Descriptors -- SIFT—Scale-Invariant Local Features -- Mathematical Symbols and Notation -- Vector Algebra and Calculus -- Statistical Prerequisites -- Gaussian Filters -- Color Space Transformations.
Sommario/riassunto	This easy-to-follow textbook is the third of three volumes which provide a modern, algorithmic introduction to digital image processing, designed to be used both by learners desiring a firm foundation on which to build, and practitioners in search of critical analysis and concrete implementations of the most important techniques. This volume builds upon the introductory material presented in the first two volumes (Fundamental Techniques and Core Algorithms) with additional key concepts and methods in image processing. Features and topics: Practical examples and carefully constructed chapter-ending exercises drawn from the authors' years of experience teaching this material Real implementations, concise mathematical notation, and precise algorithmic descriptions designed for programmers and practitioners Easily adaptable Java code and completely worked-out examples for easy inclusion in existing (and rapid prototyping of new) applications Uses ImageJ, the image processing system developed, maintained, and freely distributed by the U.S. National Institutes of

Health (NIH) Provides a supplementary website with the complete Java source code, test images, and corrections—www.imagingbook.com Additional presentation tools for instructors including a complete set of figures, tables, and mathematical elements This thorough, reader-friendly text will equip undergraduates with a deeper understanding of the topic and will be invaluable for further developing knowledge via self-study. Wilhelm Burger, Ph.D., is the director of the Digital Media degree programs at the Upper Austria University of Applied Sciences at Hagenberg. Mark J. Burge, Ph.D., is a senior principal at MITRE in Washington, D.C.