

Handbook of Digital Imaging, 1/e

Michael Kriss



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About the Book

A comprehensive and practical analysis and overview of the imaging chain through acquisition, processing and display

The Handbook of Digital Imaging provides a coherent overview of the imaging science amalgam, focusing on the capture, storage and display of images. The volumes are arranged thematically to provide a seamless analysis of the imaging chain from source (image acquisition) to destination (image print/display). The coverage is planned to have a very practical orientation to provide a comprehensive source of information for practicing engineers designing and developing modern digital imaging systems. The content will be drawn from all aspects of digital imaging including optics, sensors, quality, control, colour encoding and decoding, compression, projection and display.

Salient Features

Volume 1: Image Capture and Storage

Volume 2: Image Display and Reproduction / Image Display and Projection / Hardcopy Technology / Halftoning and Physical Evaluation / Models for Halftone Reproduction

Volume 3: Imaging System Applications / Media Imaging / Remote Imaging / Medical and Forensic Imaging

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About the Author

Michael Kriss :- Editor-in-Chief Dr. Kriss received his BA(1962), MS(1964) and PhD(1969) in Physics from the University of California at Los Angeles. He joined the Eastman Kodak Research Laboratories, Color Photography Division, in 1969 and later the Physics Division until his retirement in 1993. In his early years at Kodak, Dr. Kriss focused on color film image structure and modeled and simulated the impact of chemical development on image structure and color reproduction. When he joined the Physics Division he focused on image processing of scanned and captured digital images. Dr Kriss spent three years in Japan where helped build an advanced research facility. At Kodak he headed up the Imaging Processing Laboratory and Algorithm Developing Laboratory. He joined the University of Rochester in 1993 where he was the executive director of the Center for Electronic Imaging Systems and taught through the Computer and Electrical Engineering Department. He joined Sharp Laboratories of America in 2000 where he headed the Color Imaging Group. Dr Kriss retired in 2004 but is still active as a consultant, Adjunct Professor at Portland State University, IS&T activities, and as the Editor in Chief of the Wiley-IS&T Series on Imaging Science and Technology.