Digital Image Processing and Analysis: Human and Computer Vision Applications with CVIPtools, Second Edition

Von Scott E Umbaugh
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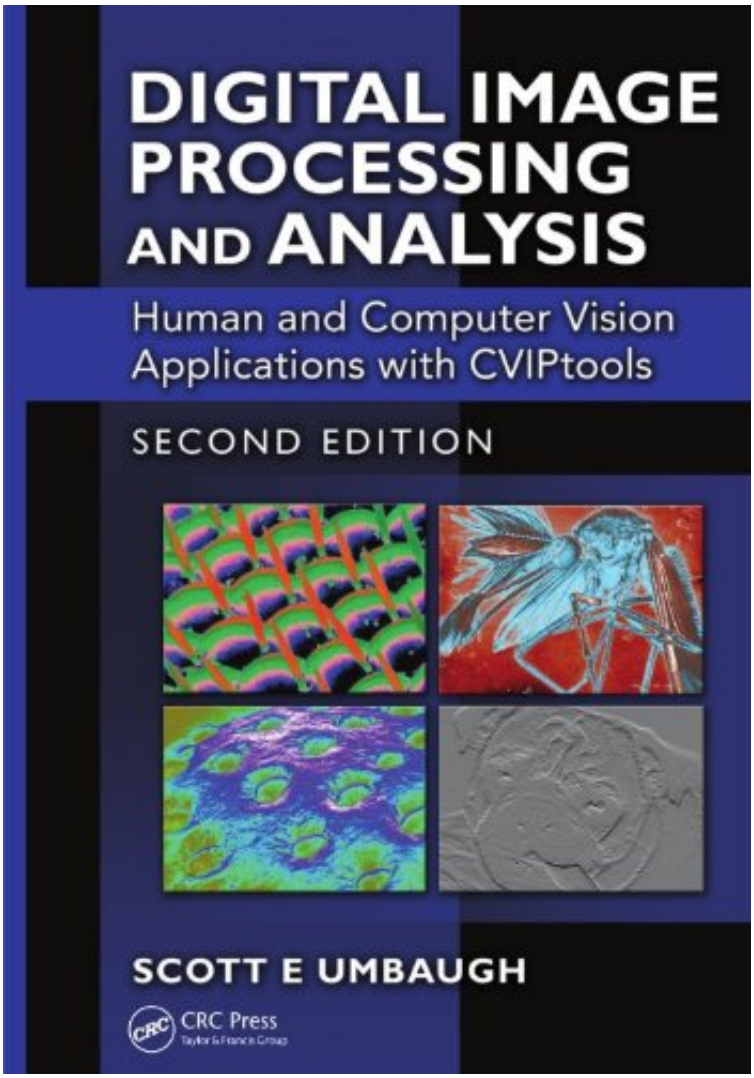

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Von Scott E Umbaugh : Digital Image Processing and Analysis: Human and Computer Vision Applications with CVIPtools, Second Edition before purchasing it in order to gage whether or not it would be worth my time, and all praised Digital Image Processing and Analysis: Human and Computer Vision Applications with CVIPtools, Second Edition:

KundenrezensionenHilfreichste Kundenrezensionen0 von 0 Kunden fanden die folgende Rezension hilfreich. Clearly

structured description of Image Processing and Computer Vision theory.Von Markus PenzkoferIn den ersten zwei Dritteln sehr gut lesbare Darstellung zur Theorie mit vielen Beispielen (Graphiken, Bilder).Kompliziertere IP-Operationen sind manchmal etwas kompakt formuliert, aber es gibt gengend Verweise auf weiterfhrende Literatur.Im letzten Drittel gute Anleitung zum Selberprogrammieren (incl. CD oder auch Download der aktuellsten Version).

KurzbeschreibungWhether for computer evaluation of otherworldly terrain or the latest high definition 3D blockbuster, digital image processing involves the acquisition, analysis, and processing of visual information by computer and requires a unique skill set that has yet to be defined a single text. Until now. Taking an applications-oriented, engineering approach, Digital Image Processing and Analysis provides the tools for developing and advancing computer and human vision applications and brings image processing and analysis together into a unified framework. Providing information and background in a logical, as-needed fashion, the author presents topics as they become necessary for understanding the practical imaging model under study. He offers a conceptual presentation of the material for a solid understanding of complex topics and discusses the theory and foundations of digital image processing and the algorithm development needed to advance the field. With liberal use of color through-out and more materials on the processing of color images than the previous edition, this book provides supplementary exercises, a new chapter on applications, and two major new tools that allow for batch processing, the analysis of imaging algorithms, and the overall research and development of imaging applications. It includes two new software tools, the Computer Vision and Image Processing Algorithm Test and Analysis Tool (CVIP-ATAT) and the CVIP Feature Extraction and Pattern Classification Tool (CVIP-FEPC). Divided into five major sections, this book provides the concepts and models required to analyze digital images and develop computer vision and human consumption applications as well as all the necessary information to use the CVIPtools environment for algorithm development, making it an ideal reference tool for this fast growing field.Pressestimmen"Where needed, chapters are extremely well illustrated with full color images supplied where appropriate. ... My impression of this textbook is that it can be easily used as a basis for instruction in a variety of image processing and analysis areas in undergraduate and graduate work in fields from computer science to electrical to biomedical engineering and in a number of related fields of endeavor involved in image perception and analysis. ... The text is written at a junior-year or above level and used as a basis for advanced studies involving images. It is quite up to date. I recommend it highly." -Paul H. King, Vanderbilt University, IEEE Pulse, July/August 2012 "This is a nicely presented book and the topics it covers in depth are well described. ... if you are looking for a book on the basics of image processing complete with some ready-made software to let you work through the ideas, this is a good choice. Needless to say it would make a good course text ..." -Mike James, IProgrammer, September 2011 "The text, which is richly illustrated with both drawings and example images, and the CVIPtools package are highly integrated. This creates a learning environment that is particularly suited to students, computer scientists, and application developers. ... Altogether, the author has produced a book that presents both the practical and theoretical aspects of digital image processing in a way that is efficient for learning, as well as research- and application-oriented development. He does an excellent job of showing how algorithms work and what the results look like. ... The CVIPtools application and libraries are very useful. Compared with the first edition, two newly added software tools, the Computer Vision and Image Processing Algorithm Test and Analysis Tool (CVIP-ATAT) and the CVIP Feature Extraction and Pattern Classification Tool (CVIP-FEPC) offer a more complete set of tools for developing and testing algorithms. ... Overall, this is an excellent text for the student or professional looking for a practical introduction to or an overview of the wide world of digital image processing and analysis." -Jeffrey Snyder and Elena Fedorovskaya, Kodak Research Laboratories, Rochester, New York, Journal of Electronic Imaging, Jul-Sep 2011/Vol. 20(3)KurzbeschreibungWhether for computer evaluation of otherworldly terrain or the latest high definition 3D blockbuster, digital image processing involves the acquisition, analysis, and processing of visual information by computer and requires a unique skill set that has yet to be defined a single text. 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