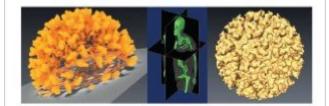
The book was found

Image Processing And Acquisition Using Python (Chapman & Hall/CRC Mathematical And Computational Imaging Sciences Series)



Image Processing and Acquisition using Python



Ravishankar Chityala Sridevi Pudipeddi

CRC Press Taylor & Fandi Group A CHAPMAN & HALL BOOK Copyrighted Material



Synopsis

Image Processing and Acquisition using Python provides readers with a sound foundation in both image acquisition and image processingâ •one of the first books to integrate these topics together. By improving readersâ [™] knowledge of image acquisition techniques and corresponding image processing, the book will help them perform experiments more effectively and cost efficiently as well as analyze and measure more accurately. Long recognized as one of the easiest languages for non-programmers to learn, Python is used in a variety of practical examples. A refresher for more experienced readers, the first part of the book presents an introduction to Python, Python modules, reading and writing images using Python, and an introduction to images. The second part discusses the basics of image processing, including pre/post processing using filters, segmentation, morphological operations, and measurements. The last part describes image acquisition using various modalities, such as x-ray, CT, MRI, light microscopy, and electron microscopy. These modalities encompass most of the common image acquisition methods currently used by researchers in academia and industry.

Book Information

Series: Chapman & Hall/CRC Mathematical and Computational Imaging Sciences Series Hardcover: 390 pages Publisher: Chapman and Hall/CRC; 1 edition (February 19, 2014) Language: English ISBN-10: 1466583754 ISBN-13: 978-1466583757 Product Dimensions: 0.8 x 6.2 x 9.2 inches Shipping Weight: 1.5 pounds (View shipping rates and policies) Average Customer Review: 5.0 out of 5 stars Â See all reviews (4 customer reviews) Best Sellers Rank: #1,309,654 in Books (See Top 100 in Books) #177 in Books > Computers & Technology > Graphics & Design > Computer Modelling > Imaging Systems #178 in Books > Science & Math > Mathematics > Applied > Graph Theory #400 in Books > Engineering & Transportation > Engineering > Bioengineering > Biomedical Engineering

Customer Reviews

This is an informative and well written text. I teach college chemistry and mathematics and I have no computer programming experience. I found the text to be very readable with excellent descriptions and images. The mathematics was clear and understandable. Each chapter has an introduction that

brings the reader back to what was previously learned and ties the concepts together. The text begins with a brief introduction to Python and describes the most popular Python modules that are relevant to image processing. It then explains concepts that are important to image enhancement in both the spatial domain and the frequency domain. This is followed by chapters on morphological operations and image measurement. Finally, the text explores image acquisition through the use of X-rays, computed tomography, magnetic resonance imaging, and both light and electron microscopes. In addition to being a text that is appropriate for a course on image processing, I would advise that any scientist or medical professional who deals with imaging should read this. It will provide you with a better understanding of imaging that will greatly enhance your appreciation of the process and will enable you to achieve results in experimentation more effectively.

The authors did an amazing job with this text. It is aimed at those with limited programming skills and image processing knowledge. It is written very clearly, with many code examples that are perfect for bookmarking and reference. Worth every penny. This book has helped improve my coding and image processing skills like I would never have imagined.

I enjoyed reading this book. Well worded, great examples, dives right into the good stuff and gives numerous applications in medical science.

I found this book to be a very helpful introduction to image processing algorighms for my research. It is well written and for me (a spectroscopist with an interest in expanding my expertise to image processing and python) the level of depth is just about perfect.

Download to continue reading...

Image Processing and Acquisition using Python (Chapman & Hall/CRC Mathematical and Computational Imaging Sciences Series) Python: PYTHON CRASH COURSE - Beginner's Course To Learn The Basics Of Python Programming In 24 Hours!: (Python, Python Programming, Python for Dummies, Python for Beginners, python crash course) Python: Learn Python In A DAY! - The Ultimate Crash Course to Learning the Basics of Python In No Time (Python, Python Course, Python Development, Python Books, Python for Beginners) Algorithms in Bioinformatics: A Practical Introduction (Chapman & Hall/CRC Mathematical and Computational Biology) Computational Partial Differential Equations Using MATLAB (Chapman & Hall/CRC Applied Mathematics & Nonlinear Science) PYTHON: Python in 8 Hours, For Beginners, Learn Python Fast! A Smart Way to Learn Python, Plain & Simple, Learn Python Programming Language in Easy Steps, A Beginner's Guide,

Start Coding Today! Python: Learn Web Scraping with Python In A DAY! - The Ultimate Crash Course to Learning the Basics of Web Scraping with Python In No Time (Web Scraping ... Python Books, Python for Beginners) Python: Learn Python FAST - The Ultimate Crash Course to Learning the Basics of the Python Programming Language In No Time (Python, Python Programming, ... (Learn Coding Fast with Hands-On Project 7) Computational Methods of Feature Selection (Chapman & Hall/CRC Data Mining and Knowledge Discovery Series) Introduction to Computational Biology: Maps, Sequences and Genomes (Chapman & Hall/CRC Interdisciplinary Statistics) Programming #45: Python Programming Professional Made Easy & Android Programming In a Day! (Python Programming, Python Language, Python for beginners, ... Programming Languages, Android Programming) Data Classification: Algorithms and Applications (Chapman & Hall/CRC Data Mining and Knowledge Discovery Series) Numerical Techniques for Direct and Large-Eddy Simulations (Chapman & Hall/CRC Numerical Analysis and Scientific Computing Series) Introduction to Modern Cryptography: Principles and Protocols (Chapman & Hall/CRC Cryptography and Network Security Series) Introduction to Modern Cryptography, Second Edition (Chapman & Hall/CRC Cryptography and Network Security Series) The Garbage Collection Handbook: The Art of Automatic Memory Management (Chapman & Hall/CRC Applied Algorithms and Data Structures series) Introduction to Network Security (Chapman & Hall/CRC Computer and Information Science Series) Bayesian Designs for Phase I-II Clinical Trials (Chapman & Hall/CRC Biostatistics Series) The Kurzweil-Henstock Integral and Its Differential: A Unified Theory of Integration on R and Rn (Chapman & Hall/CRC Pure and Applied Mathematics) Web 2.0 and Beyond: Principles and Technologies (Chapman & Hall/CRC Textbooks in Computing)

<u>Dmca</u>