

A Computational Introduction to Digital Image Processing, Second Edition

By Alasdair McAndrew



A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew

Highly Regarded, Accessible Approach to Image Processing Using Open-Source and Commercial Software

A Computational Introduction to Digital Image Processing, Second Edition explores the nature and use of digital images and shows how they can be obtained, stored, and displayed. Taking a strictly elementary perspective, the book only covers topics that involve simple mathematics yet offer a very broad and deep introduction to the discipline.

New to the Second Edition

This second edition provides users with three different computing options. Along with MATLAB®, this edition now includes GNU Octave and Python. Users can choose the best software to fit their needs or migrate from one system to another. Programs are written as modular as possible, allowing for greater flexibility, code reuse, and conciseness. This edition also contains new images, redrawn diagrams, and new discussions of edge-preserving blurring filters, ISODATA thresholding, Radon transform, corner detection, retinex algorithm, LZW compression, and other topics.

Principles, Practices, and Programming

Based on the author's successful image processing courses, this bestseller is suitable for classroom use or self-study. In a straightforward way, the text

illustrates how to implement imaging techniques in MATLAB, GNU Octave, and Python. It includes numerous examples and exercises to give students hands-on practice with the material.

▼ Download A Computational Introduction to Digital Image Proc ...pdf

Read Online A Computational Introduction to Digital Image Pr ...pdf

A Computational Introduction to Digital Image Processing, Second Edition

By Alasdair McAndrew

A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew

Highly Regarded, Accessible Approach to Image Processing Using Open-Source and Commercial Software

A Computational Introduction to Digital Image Processing, Second Edition explores the nature and use of digital images and shows how they can be obtained, stored, and displayed. Taking a strictly elementary perspective, the book only covers topics that involve simple mathematics yet offer a very broad and deep introduction to the discipline.

New to the Second Edition

This second edition provides users with three different computing options. Along with MATLAB®, this edition now includes GNU Octave and Python. Users can choose the best software to fit their needs or migrate from one system to another. Programs are written as modular as possible, allowing for greater flexibility, code reuse, and conciseness. This edition also contains new images, redrawn diagrams, and new discussions of edge-preserving blurring filters, ISODATA thresholding, Radon transform, corner detection, retinex algorithm, LZW compression, and other topics.

Principles, Practices, and Programming

Based on the author's successful image processing courses, this bestseller is suitable for classroom use or self-study. In a straightforward way, the text illustrates how to implement imaging techniques in MATLAB, GNU Octave, and Python. It includes numerous examples and exercises to give students hands-on practice with the material.

A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew Bibliography

Rank: #1516917 in eBooksPublished on: 2015-10-28Released on: 2015-10-28

• Format: Kindle eBook



▼ Download A Computational Introduction to Digital Image Proc ...pdf



Read Online A Computational Introduction to Digital Image Pr ...pdf

Download and Read Free Online A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew

Editorial Review

Review

"This textbook does an excellent job covering the basics of image processing. I highly recommend it." ?Reza Malek-Madani, Professor of Mathematics, US Naval Academy

"This book is the most concise and readable introductory text on digital image processing I have ever encountered. It provides a gentle introduction to the field with little mathematics and plenty of examples. Each topic is clearly explained and can be practiced using ready-made computer programs written in three programming languages (MATLAB, Octave, and Python)."

?Mahamed G.H. Omran, PhD, Gulf University for Science & Technology (GUST), Kuwait

About the Author

Alasdair McAndrew is a senior lecturer and discipline leader in mathematics and physics at Victoria University in Melbourne, Australia. His teaching and research interests include image processing, cryptography, mathematics, and mathematics education. An avid technophile, he is the author of the CRC Press book *Introduction to Cryptography with Open-Source Software*. He holds a PhD from Monash University.

Users Review

From reader reviews:

Ashley Williams:

Why don't make it to become your habit? Right now, try to prepare your time to do the important work, like looking for your favorite guide and reading a book. Beside you can solve your trouble; you can add your knowledge by the book entitled A Computational Introduction to Digital Image Processing, Second Edition. Try to stumble through book A Computational Introduction to Digital Image Processing, Second Edition as your close friend. It means that it can to be your friend when you feel alone and beside that course make you smarter than previously. Yeah, it is very fortuned in your case. The book makes you considerably more confidence because you can know every little thing by the book. So , let's make new experience as well as knowledge with this book.

David Otten:

This book untitled A Computational Introduction to Digital Image Processing, Second Edition to be one of several books in which best seller in this year, that is because when you read this publication you can get a lot of benefit on it. You will easily to buy that book in the book retailer or you can order it by way of online. The publisher in this book sells the e-book too. It makes you more readily to read this book, since you can read this book in your Touch screen phone. So there is no reason for you to past this guide from your list.

Brad Sharpe:

Reading a publication tends to be new life style with this era globalization. With reading through you can get a lot of information which will give you benefit in your life. Having book everyone in this world can easily share their idea. Guides can also inspire a lot of people. A great deal of author can inspire their very own reader with their story or even their experience. Not only situation that share in the guides. But also they write about the data about something that you need illustration. How to get the good score toefl, or how to teach children, there are many kinds of book which exist now. The authors in this world always try to improve their talent in writing, they also doing some analysis before they write to the book. One of them is this A Computational Introduction to Digital Image Processing, Second Edition.

Sheila Collins:

Reading a book to be new life style in this 12 months; every people loves to examine a book. When you learn a book you can get a great deal of benefit. When you read textbooks, you can improve your knowledge, mainly because book has a lot of information onto it. The information that you will get depend on what types of book that you have read. If you wish to get information about your examine, you can read education books, but if you act like you want to entertain yourself look for a fiction books, such us novel, comics, along with soon. The A Computational Introduction to Digital Image Processing, Second Edition provide you with a new experience in reading through a book.

Download and Read Online A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew #3AFG0T72DML

Read A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew for online ebook

A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew books to read online.

Online A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew ebook PDF download

A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew Doc

A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew Mobipocket

A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew EPub

3AFG0T72DML: A Computational Introduction to Digital Image Processing, Second Edition By Alasdair McAndrew