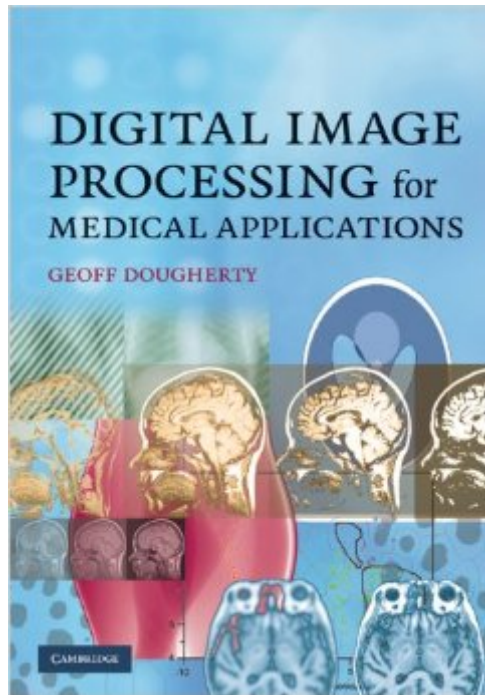# Digital Image Processing For Medical Applications

Synopsis

Image processing is a hands-on discipline, and the best way to learn is by doing. This text takes its motivation from medical applications and uses real medical images and situations to illustrate and clarify concepts and to build intuition, insight and understanding. Designed for advanced undergraduates and graduate students who will become end-users of digital image processing, it covers the basics of the major clinical imaging modalities, explaining how the images are produced and acquired. It then presents the standard image processing operations, focusing on practical issues and problem solving. Crucially, the book explains when and why particular operations are done, and practical computer-based activities show how these operations affect real images. All images, links to the public-domain software ImageJ and custom plug-ins, and selected solutions are available from www.cambridge.org/books/dougherty.

Book Information

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Customer Reviews

Difficult to follow. Equations appear without proper explanation. Illustrations supposedly for comparison, look identical.Exercises, using ImageJ, a java-based open licence program, are good.

Some of the exercises, however, fall foul of Java's inbuilt security, and are impossible to run, except by advanced IT personnel.

I was lucky enought to recieve a first draft of this book for my class with Dr. Dougherty. He is an amazing individual & a captivating professor. At the tiem I didn't appreciate this book as much as one should, however since I have just completed Ultrasound School at Loma Linda University, It has been a wonderful reference material when it comes to the "physics" of ultrasound. It was truly something to be taught the book from the author, and to now see he has written a new one, is fantastic, I cannot wait to add it to my collection. This is a must buy for anyone wantint to know the "how" or "why" medical imaging works!

Well written for the informatics student & the imageJ link with tuts are helpful. Links to some you tube clips may be beneficial though.

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