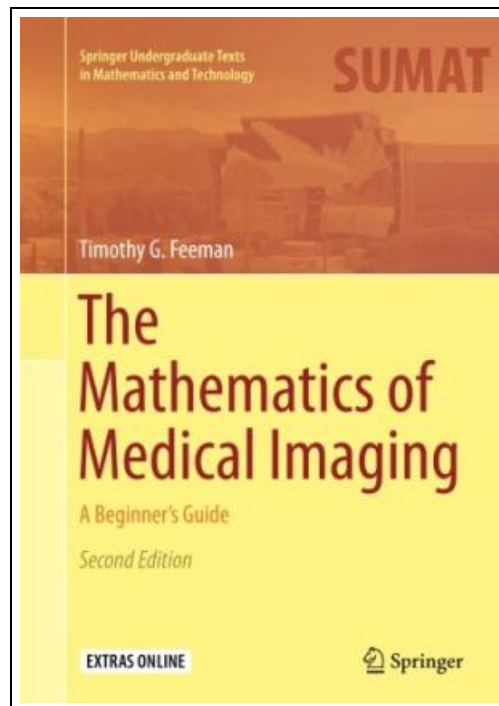


The Mathematics of Medical Imaging: A Beginners Guide (Springer Undergraduate Texts in Mathematics and Technology)



Filesize: 5.6 MB

Reviews

An exceptional publication and also the typeface applied was fascinating to learn. It normally will not expense excessive. Your life period will be transform once you comprehensive looking over this pdf.
(Rachelle O'Connell)

THE MATHEMATICS OF MEDICAL IMAGING: A BEGINNERS GUIDE (SPRINGER UNDERGRADUATE TEXTS IN MATHEMATICS AND TECHNOLOGY)



Springer. Paperback. Condition: New. 197 pages. The basic mathematics of computerized tomography, the CT scan, are aptly presented for an audience of undergraduates in mathematics and engineering. Assuming no prior background in advanced mathematical analysis, topics such as the Fourier transform, sampling, and discrete approximation algorithms are introduced from scratch and are developed within the context of medical imaging. A chapter on magnetic resonance imaging focuses on manipulation of the Bloch equation, the system of differential equations that is the foundation of this important technology. Extending the ideas of the acclaimed first edition, new material has been added to render an even more accessible textbook for course usage. This edition includes new discussions of the Radon transform, the Dirac delta function and its role in X-ray imaging, Kaczmarz method and least squares approximation, spectral filtering, and more. Copious examples and exercises, new computer-based exercises, and additional graphics have been added to further delineate concepts. The use of technology has been revamped throughout with the incorporation of the open source programming environment R to illustrate examples and composition of graphics. All R code is available as extra source material on SpringerLink. From the reviews of the first edition: This book is valuable, for it addresses with care and rigor the relevance of a variety of mathematical topics to a real-world problem. This book is well written. It serves its purpose of focusing a variety of mathematical topics onto a real-world application that is in its essence mathematics. The Journal of Nuclear Medicine, Vol. 51 (12), December, 2010 This new book by Timothy Feeman, truly intended to be a beginners guide, makes the subject accessible to undergraduates with a working knowledge of multivariable calculus and some experience with vectors and matrix methods. author handles the material with clarity and grace The Mathematical Association...



[Read The Mathematics of Medical Imaging: A Beginners Guide \(Springer Undergraduate Texts in Mathematics and Technology\) Online](#)



[Download PDF The Mathematics of Medical Imaging: A Beginners Guide \(Springer Undergraduate Texts in Mathematics and Technology\)](#)

Relevant PDFs



The Picture of Dorian Gray: A Moral Entertainment (New edition)

Oberon Books Ltd. Paperback. Book Condition: new. BRAND NEW, The Picture of Dorian Gray: A Moral Entertainment (New edition), Oscar Wilde, John Osborne, The Picture of Dorian Gray is a stage adaptation of Oscar Wilde's...

[Read ePub »](#)



The Trouble with Trucks: First Reading Book for 3 to 5 Year Olds

Anness Publishing. Paperback. Book Condition: new. BRAND NEW, The Trouble with Trucks: First Reading Book for 3 to 5 Year Olds, Nicola Baxter, Geoff Ball, This is a super-size first reading book for 3-5 year...

[Read ePub »](#)



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselves By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now...

[Read ePub »](#)



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselves By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1625)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English Brand New Book ***** Print on Demand *****.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now you...

[Read ePub »](#)



California Version of Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Pearson, United States, 2015. Loose-leaf. Book Condition: New. 10th. 249 x 201 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies...

[Read ePub »](#)