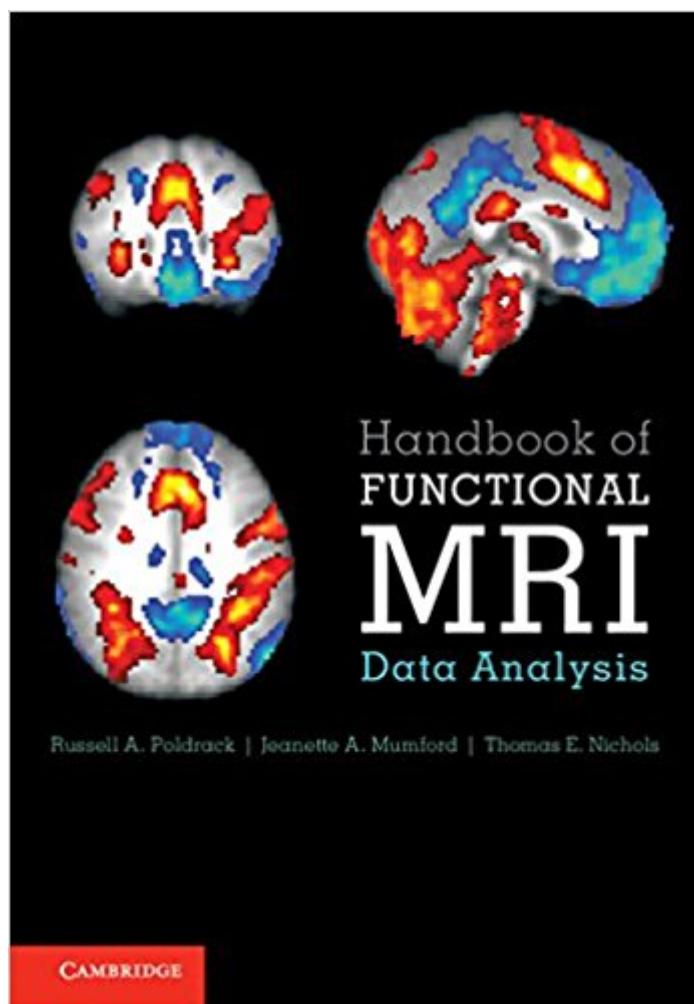**The book was found**

Handbook Of Functional MRI Data Analysis

Synopsis

Functional magnetic resonance imaging (fMRI) has become the most popular method for imaging brain function. Handbook for Functional MRI Data Analysis provides a comprehensive and practical introduction to the methods used for fMRI data analysis. Using minimal jargon, this book explains the concepts behind processing fMRI data, focusing on the techniques that are most commonly used in the field. This book provides background about the methods employed by common data analysis packages including FSL, SPM, and AFNI. Some of the newest cutting-edge techniques, including pattern classification analysis, connectivity modeling, and resting state network analysis, are also discussed. Readers of this book, whether newcomers to the field or experienced researchers, will obtain a deep and effective knowledge of how to employ fMRI analysis to ask scientific questions and become more sophisticated users of fMRI analysis software.

Book Information

Hardcover: 238 pages

Publisher: Cambridge University Press; 1 edition (August 22, 2011)

Language: English

ISBN-10: 0521517664

ISBN-13: 978-0521517669

Product Dimensions: 8.5 x 0.8 x 10 inches

Shipping Weight: 2.2 pounds (View shipping rates and policies)

Average Customer Review: 4.6 out of 5 stars   12 customer reviews

Best Sellers Rank: #107,149 in Books (See Top 100 in Books)   #19 inÃ Â Books > Textbooks > Medicine & Health Sciences > Medicine > Clinical > Radiology & Nuclear Medicine > Diagnostic Imaging   #22 inÃ Â Books > Medical Books > Medicine > Internal Medicine > Radiology > Diagnostic Imaging   #41 inÃ Â Books > Textbooks > Medicine & Health Sciences > Research > Biostatistics

Customer Reviews

"Wow! Very often in neuroimaging a title has little relationship to what follows. That is clearly not the case with the Handbook of Functional MRI Data Analysis by Poldrack, Mumford, and Nichols. This relatively slender volume is all that handbook should be: It is crafted by true experts in the field, it is structured so that a newcomer can understand a method's strengths and weaknesses, but it also contains meaty information useful to experts. The book touches on all of the major analytical approaches current in the field and, while I don't agree with every choice the authors make, their

advice is always well-conceived. This will be a standard reference on every neuroimager's shelf." Steven Petersen, Washington University, St Louis"This book, by some of the best in the field, will no doubt be the go-to book found in every imaging lab and recommended for all trainees. Poldrack, Mumford, and Nichols cover the most basic to sophisticated imaging analyses in a wonderfully accessible way." B. J. Casey, Sackler Institute, Weill Cornell Medical College"This is a great and timely book. The authors start with the basic concepts of fMRI and image analysis, develop the standard processings and statistical models, and finally explain in a simple and didactic style more advanced topics such as connectivity and machine learning techniques ... This textbook provides a comprehensive, and yet very clear, introduction to all of the important aspects of FMRI data analysis. It is extremely readable, and I would strongly recommend anyone new to the field of neuroimaging to read this from cover to cover. Psychologists and medics will find it accessible, and not mathematically daunting, while engineers and other methods researchers will find the breadth of imaging-related issues a very valuable background." Steve Smith, FMRIB Analysis Group, Oxford"The book is a must in any research laboratory or clinical environment using fMRI, and it is the perfect reading for students or researchers, whether they want to develop fMRI data analysis methods or understand and apply these methods. I believe this book will be a best-seller in our field and a reference for many years because it ideally fills the gap between introductory and advanced research textbooks." Jean-Baptiste Poline, Neurospin, Institut d'Imagerie BiomÃƒÂ©dicale, CEA, France

This book provides a comprehensive and practical introduction to the methods used for fMRI data analysis. Using minimal jargon, it explains the concepts behind processing fMRI data, focusing on the techniques that are most commonly used in the field. Readers will obtain a deep and effective knowledge of how to employ fMRI analysis to ask scientific questions and become more sophisticated users of fMRI analysis software.

Great book for those that are outside of the brain imaging field such as myself (EE student working with MRI data). It can be viewed as one long survey paper. It conveys the salient ideas of processing and analyzing MRI data without getting too bogged down in the details. References will point you to more detailed treatments if you need to dig deeper on a particular subject.My recommendation is to get the physical copy. Although this book doesn't have a lot of formulas and figures, the ones it does have are a pain to read. You have to double click the image to zoom in loosing all of the context (i.e. Figure labels, the narrative describing the equation/figure etc...)

This is a well-written overview of fMRI processing. It will certainly be useful to those beginning work in the field. I think it's probably also useful as a quick reference or refresher to people who have been in the field for years to decades.The great strength of the book is readability - I think I read it in 3 or 4 sittings with little effort. It is a good survey - it hits the high points of stages of processing and explains the differences, advantages, and disadvantages of various approaches without being longwinded or getting bogged down in details. It also notes which options are available in the various major software packages.If you want to be reasonably up-to-date on how processing strategies across the field have evolved and are currently implemented, this book is a great place to start reading.

This is definitely a great book. I recommend it for anyone getting into the field. There are SOME questions that get glossed over. It does a great job of going over all the meta-analyses of fMRI from the ground up. Starting from defining what an image is all the way to MVPA. If it had a fewwwww more details it would be 5 Stars, but really it's just nitpicking. This is an excellent job. Anyone new to fMRI analysis should have a copy of this.

This text is a very good introduction to fMRI analysis methods. I must stress that this is going to be most useful for beginners; I was able to read the whole book over the course of 2 evenings. However, it's reasonably priced, contains a lot of the essential, historical references for the field, small and easy to carry, and is good to have on-hand.You won't find any MR physics in this, but for a more thorough treatment of that (and even of analysis methods), I would recommendÃ Â Functional Magnetic Resonance Imaging, Second EditionÃ Â by Huettel et al.For a much more advanced, in-depth, technical treatment of neuroimaging analysis, I recommendÃ Â Statistical Parametric Mapping: The Analysis of Functional Brain ImagesÃ Â by Friston et al. However, that text is very math-heavy; Poldrack's text doesn't assume much math experience at all.

this book is very well written, not too many words, enough to give you a good understanding of fMRI and why you need math and statistics to analyse data.it was my first book in fMRI, it was really very helpful.I am a researcher, graduated as a dentist.my thanks to the authors

This book is an absolutely necessity for those who are not familiar with fMRI analyses or work, and

provide a broad comprehensive picture of the rapidly growing field, as well as the technicalities of the research details. This handbook is well-written and concise, very readable for those who are interested in getting a solid introduction to fMRI data analyses. It provides a high-level description of various techniques and methods (as well as reviews of various softwares/programs used for analysis), without diving into too many details of the physics of the machinery. (Although it does provide numerous citations if you'd like to read more about a specific topic.) Great for those who are hoping to learn more about fMRI, and great review for those who are comfortable with fMRI and want to get caught up on current directions in fMRI research.

very useful and detailed for beginners

As a researcher that taught myself fMRI analysis, I have found this book to be a godsend. As other reviewers have mentioned, the book is really focused on covering the basic principles of why we do what we do. A lot of material wasn't new to me, but it was wonderful to have it all in one place and eloquently explained by researchers who are highly respected in this field. I learned a lot while reading it, and regularly turn to it when need be. Now when Im training new students, they are handed a copy of my Huettel book and this book.

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