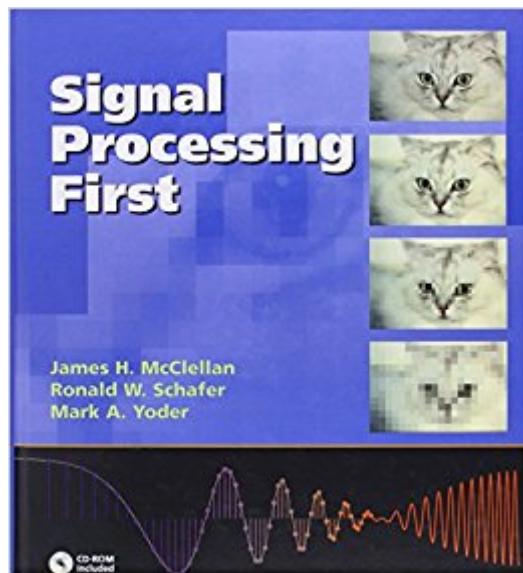The book was found

Signal Processing First

Synopsis

Designed and written by experienced and well-respected authors, this hands on, multi-media package provides a motivating introduction to fundamental concepts, specifically discrete-time systems. Unique features such as visual learning demonstrations, MATLAB laboratories and a bank of solved problems are just a few things that make this an essential learning tool for mastering fundamental concepts in today's electrical and computer engineering forum.   Covers basic DSP concepts, integrated laboratory projectsÃ¢â¬â¢related to music, sound and image processing. Other topics include new MATLAB functions for basic DSP operations, Sinusoids, Spectrum Representation, Sampling and Aliasing, FIR Filters, Frequency Response of FIR Filters, z-Transforms, IIR Filters, and Spectrum Analysis.   Useful as a self-teaching tool for anyone eager to discover more about DSP applications, multi-media signals, and MATLAB.

Book Information

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Average Customer Review: 3.6 out of 5 stars   28 customer reviews

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Customer Reviews

This best-selling, hands-on, multimedia package provides an introduction to fundamental concepts, specifically discrete-time systems, for beginning engineering students. Created and written by the same well-respected authors, it has been adopted in over 100 institutions worldwide since publication. This class-tested learning package is also widely used as a self-teaching tool to discover more about USP applications, multimedia signals, and MATLABÃ Â®. Unique features such as visual learning demonstrations, MATLAB laboratories, and a bank of solved homework

problems are just a few of the things that make this an essential learning tool for mastering fundamental concepts in today's electrical and computer engineering curricula.

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I simply refer to this as "Ugh, that book". Unfortunately my courses require this overpriced text. The material presented is the absolute bare minimum and does not give any insight of what is actually going on. The few examples they do give are always the simplest case and is just numbers plugged into a definition. The CD that comes with the book is nearly useless too.If you too are a student who has to use this pitiful book, do yourself a favor and buy a copy of "Understanding Digital Signal Processing" by Lyons. Your grade will thank you.

This book is a must-read for EE or SW Engr students as a concept builder on learning the DSP as the first class. The homework assignments build the path for learning the DSP step-by-step. In chapter 4, Sampling and Aliasing, paves the way to understand the FIR and IIR using the z-Transform--especially some homework problems in chapter 6, 7 and 8, are brain-storm types, which depict a cascade connection of two or three LTI systems, with the inputs in time-domain, the students need to solve them in frequency-domain by applying the sampling techniques learned in chapter 4, from C-to-D using the Laplace Transform, then finding the frequency response in $H(z)$ and convert them to D-to-C forms, in which the FIR circuits have one pole while the IIR have multiple poles. That's all I learned from this great textbook. I think that the update version (release in 2014?) would be my favorite one too.

This is not the worst book ever, but it is not great if you have to use it for an undergrad signals and systems class. It is one that gives a few relatively basic examples, and the authors love proofs. But the examples only really help you work through a few of the problems in the problem set. It is really not something that most people will be able to teach themselves from, which if you have a teacher

that explains the material well probably will not be a problem, but if not you may have to look into some of the supplements that are out there.I could see it being more useful in a masters level EE program where you should have a fundamental understanding of the topics covered in digital signal processing. When however you are first learning the subject, it is not the easiest book to follow along with. Plus it is lacking a chapter on Laplace Transform (which according to my teacher future editions will cover), which you absolutely will be exposed to in your signals and systems class.

Each concept has only a few paragraphs explaining it, if that. Examples are few and far between and far too simple to even extrapolate to anything worthwhile. I bought this book to supplement poorly presented lectures. Now I'm left disappointed from both sources.

Nice book, sometimes the problems become repetitive, but gives good examples and explains the subjects well.Signal Processing First

The book arrived almost brand new! Go figure. The cd offers a lot of helpful problems that are worked out, too. Easy to read and highly recommended for an intro signals class.

This is a great buy. It takes you through the fundamental concepts and provides solutions to the exercises and many worked out homework problems. Great for self study.

We use this book for our sophomore-level course in signal processing for biomedical engineering students. For our needs, this is the right book, for several reasons:* First and foremost, the book covers signals only, not systems. This means that the course can be taken without prior knowledge of differential equations.* The writing is quite clear. Even my sophomores agree that the book is readily readable for the most part.* The authors' method, described as "jumping around" by several other reviewers, works quite well. Topics like aliasing and undersampling are introduced first for simple cases like single sinusoids, then come up more generally later. My students respond well to this approach.* It is fairly complete, covering both continuous- and discrete-time methods.There are some downsides:* The book is dated. I look forward to the new edition that is slated to come out in 2013.* I find the MATLAB examples and demos unimpressive and not very useful, even though I use MATLAB fairly extensively in my class.* More modern examples, e.g. from image processing, would be helpful. Fortunately, it is not that difficult for the instructor to provide these himself / herself.In summary, our students make immense progress using this book. It prepares them well for

follow-up courses in linear systems or digital signal processing.

Discrete-Time Signal Processing (3rd Edition) (Prentice-Hall Signal Processing Series) Multidimensional Digital Signal Processing (Prentice-Hall Signal Processing Series) Discrete-Time Signal Processing (2nd Edition) (Prentice-Hall Signal Processing Series) Biomedical Signal Processing and Signal Modeling Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction Signal Processing First First Principles of Discrete Systems and Digital Signal Processing (Addison-Wesley Series in Electrical Engineering) Robust and Adaptive Control: With Aerospace Applications (Advanced Textbooks in Control and Signal Processing) Health Monitoring of Aerospace Structures: Smart Sensor Technologies and Signal Processing Essentials of Digital Signal Processing Understanding Digital Signal Processing (3rd Edition) VLSI Digital Signal Processing Systems: Design and Implementation Vlsi Analog Signal Processing Circuits Digital Signal Processing (4th Edition) Robotics: Modelling, Planning and Control (Advanced Textbooks in Control and Signal Processing) Applied Digital Signal Processing: Theory and Practice Digital Signal Processing, Second Edition: Fundamentals and Applications Digital Signal Processing Using MATLAB & Wavelets Probability and Random Processes, Second Edition: With Applications to Signal Processing and Communications Probability and Random Processes: With Applications to Signal Processing and Communications