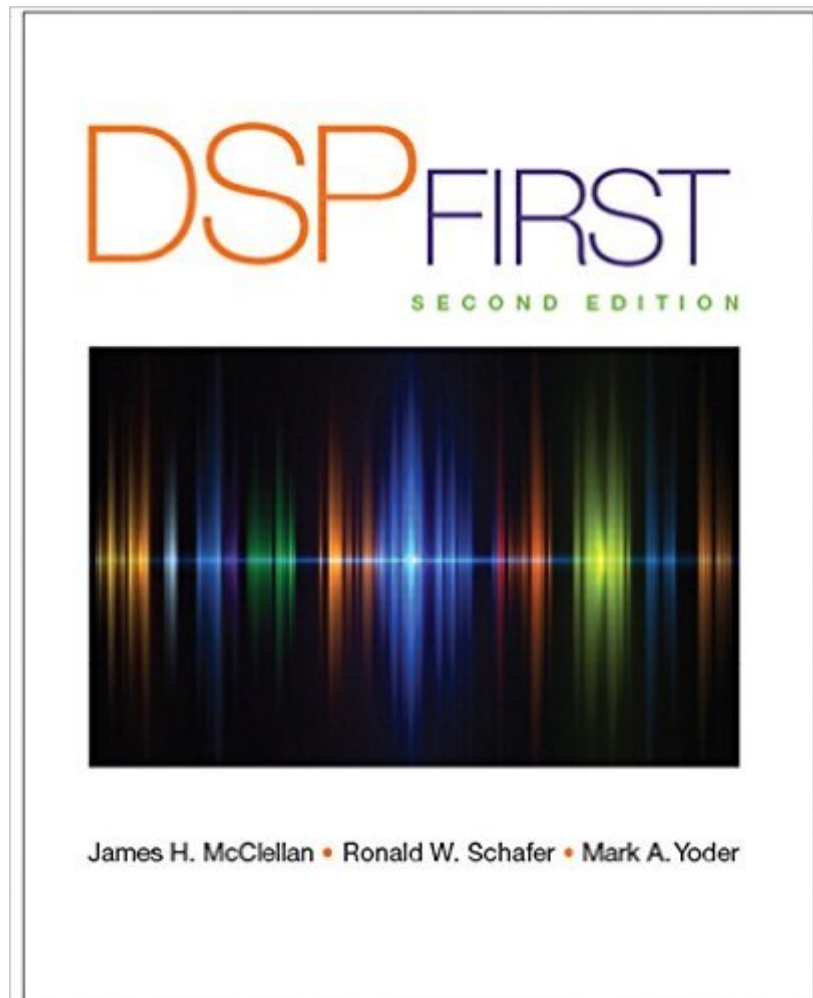# The book was found

DSP First (2nd Edition)

Synopsis

For introductory courses (freshman and sophomore courses) in Digital Signal Processing and Signals and Systems. Text may be used before the student has taken a course in circuits.　DSP First　and it's accompanying digital assets are the result of more than 20 years of work that originated from, and was guided by, the premise that signal processing is the best starting point for the study of electrical and computer engineering. The "DSP First" approach introduces the use of mathematics as the language for thinking about engineering problems, lays the groundwork for subsequent courses, and gives students hands-on experiences with MATLAB.Â　The Second Edition features three new chapters on the Fourier Series, Discrete-Time Fourier Transform, and theÂ The Discrete Fourier Transform as well as updated labs, visual demos, an update to the existing chapters, and hundreds of new homework problems and solutions.

Book Information

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Average Customer Review: 4.1 out of 5 starsÂ Â See all reviewsÂ (17 customer reviews)

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Customer Reviews

I consider this book as a signal processing enabling book and I use it with my students at the University as an introduction, previous to networking or Multimedia specific subjects. I recommend this book to anyone who is looking for a gentle introduction to digital signal processing, and is no willing to pass through a high math path. The math's are there but in their just proportion. The author is concerned about concepts, and the movies on the CD are of great help in order to get them. Th introduction to complex notation, difference equations and convolution are the gentles I've read. If you manage to solve the numeric exercises, you end with working concepts and skills in the

area. The authors try to give examples from several fields like sounds, pictures and video in order to make the material understandable. Its not a very rigorous book but is a valuable one if you prefer concepts to mathematical rigor. After working the proposed projects, you can deal with filtering, image analysis, sampling, aliasing and several other signal processing techniques knowing what you are doing.

I think this book is absolutely outstanding. I don't understand any of the negative comments. The cd that comes with the book is indispensble. It provides example after example. I actually bought schaum's outline of dsp as well, but because of all the examples on the cd (they are handwritten) I don't even have a need to refer to the outline.In addition, I thought the content of the chapters to be very readable. The only downside is that because the book is dated 1998 the matlab code is out of date and some of the drills no longer work with the newer versions.

In the first few chapters of the book, the authors do presume 2 things. 1) You know something about switching between cos terms and imaginary numbers (Euler), and 2) You have access Matlab to run the code peppered throughout the book.1) Well, the truth is you need to grind through some of these alternative ways of representing a sinusoid. If you are a little weak in an area of say how to get the real part of e^i(theta*t), you will struggle for a while. But I think the struggle is part of the learning process anyway, so not such a bad thing (there are helpful review topics in the back of the book).2)As for needing Matlab to get any benefit from the book, just download Octave. It will run most m files and give you 2d and 3d plots. So Matlab in not an issue.The book offers a lot of media demos i.e. a short movie of how a positive and negative frequency (opposite rotating Phasor's) can combine to create a real result. Aliasing, short explanation on generating musical note frequencies. etc.I am only through the 1st 3 chapters, but I feel that the book is doing what it is supposed to do, help me learn some fundamentals. I will read Lyons book next, and I would bet that it will be much easier reading after the foundation I have built up from this one. Caveat: I am doing this just for my own enjoyment, so I am not under a time constraint that a student might be. I also expect I will need to read several other books as well to get proficient at DSP. But I do think this one has quite a bit to offer. Ya gotta put some work into it.If DSP was easy, everybody would be doing it! :)

This book, along with "Understanding Digital Signal Processing" and Steiglitz' "DSP Primer" are the best, most useful, yet gentle introductions to DSP I have ever read. If only I had this book before I entered grad school! The CD-ROM that comes with it is very well done; a brilliant presentation!

Highly recommended.

This is by far the best introductory DSP book - forget the rest and get this one. The authors take you by the hand and with their years of teaching and research experience, lead you step by step into the strange and unique world of DSP. The CD examples, animations, and audio summaries are extremely valuable. Make sure that you look at them, only then will you really "get it", instead of being just an equation manipulator. This book is also very well suited for self-study professional engineer. Bravo! The standard has been set, let's see if other authors can follow.

This textbook intimidated me when I first opened it, however now that I'm 75% of way through my signal analysis course I can say it actually is good book....Someone with strong mathematical skills and a mind for programming could easily teach themselves DSP from this book - I am happy that I have a good professor to help the learning process....But overall- good textbook

One of the best books on DSP along with its companion Book "Signal Processing First", Oppenheim's "Signals & Systems" and "Discrete-time Signal Processing" are the "must have" if you want to study in the field of signal processing. Intuitive, easy to read yet it includes all math details. Better than Richard Lyons' "Understanding DSP", if you are mathematically inclined, in my opinion. Highly recommended!

This book is a great introductory book on analog and digital signals. It doesn't require any previous knowledge on signals and systems. It is student friendly, and can help alot in understanding the basics of the topic. I recommend this book to all those who would like to take an idea about signals.

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