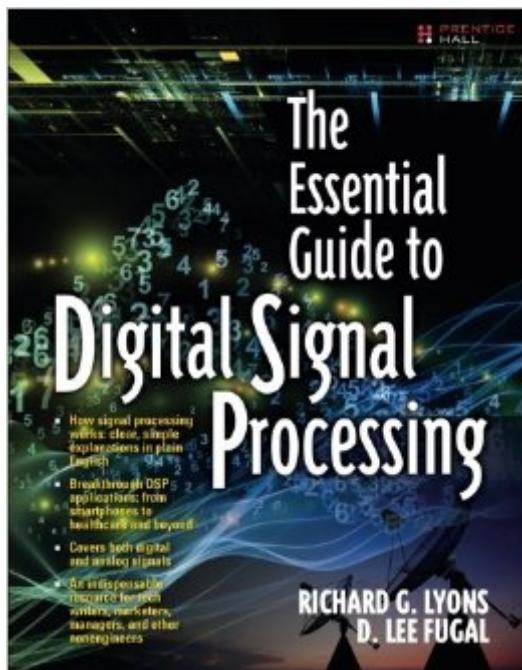


The book was found

The Essential Guide To Digital Signal Processing (Essential Guide Series)



Synopsis

How signal processing works: clear, simple explanations in plain English Breakthrough DSP applications: from smartphones to healthcare and beyond Covers both digital and analog signals An indispensable resource for tech writers, marketers, managers, and other nonengineers Â The Complete DSP Guide for Businesspeople and Nontechnical Professionals Â Digital signal processing (DSP) technology is everywhereâ “each time you use a smartphone, tablet, or computer; play an MP3; watch a digital TV or DVD; get GPS directions; play a video game; take a digital photo; or even have an MRI, DSP technology is at work. Â Now, for the first time, The Essential Guide to Digital Signal Processing offers readers of all levels simple, plain-English explanations of digital and analog signals and modern DSP applications. Whether you sell technology, write about it, manage it, fix it, or invest in it, this is the book for you. Â Using everyday examples and simple diagrams, two leading DSP consultants and instructors completely demystify signal processing. Youâ ™ll discover what digital signals are, how theyâ ™re generated, and how theyâ ™re changing your life. Â Youâ ™ll learn all you need to know about digital signal collection, filtering, analysis, and more, and how DSP works in todayâ ™s most exciting devices and applications. Â Coverage includes How engineers understand and work with analog signal spectra and frequencies How digital signals are generated and used in modern electronic devices The surprising things that happen when analog signals are converted to digital form How (and why) engineers compute digital signal spectra with Fourier transforms What wavelets are and how theyâ ™re used everywhere, from medicine to the camera in your smartphone How digital filters are used in DSP applications Cutting-edge DSP applications, from automatic music-tuning software to medical EKG signal analysis A comprehensive glossary of signal processing terminology and acronyms Â Youâ ™ll gain a clear, conceptual understanding of all key signal processing operations and vocabulary. That means youâ ™ll understand much of the âœmagicâ • built into todayâ ™s newest devices, and youâ ™ll be ready to succeed in virtually any nontechnical role that requires DSP knowledge. Â

Book Information

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Customer Reviews

This is a great book for even experienced DSP engineers. Especially the ones that don't use it every day. Chapter 5 is World Class information, but the entire book is perfect for what they are trying to convey. And it is a great background for what is needed when you use the best book available "Understanding Digital Signal Processing", Rev. 3.

This is just a great book for non-engineers. (electrical that is.) It explains all the big buzz words in simple language and with great many pictures. The emphasis given the book is written by Lyons is on DSP. But there is a lot to learn here. On nearly every page, you will hear your self saying ah, now I see! I think this would be a great book for any smart high school student headed to engineering school. It covers a large swath of the field and will give very good head-start. On the other hand, I gave a copy of the book to one of my friends who is professor of mechanical engineering locally. He loved it. So the range is large, high school to PhD. But really any one who is working in the tech field and really wants to understand what these terms means, should get this book. - Charan Langton

Some parts were to basic (filters) I liked the book because it covered the basic needs for understanding how signals works

If you ever wondered how & why audio is transmitted & stored digitally, then this book is a great starting point in understanding DSP. It won't make you an engineer but it will help you appreciate mp3, CD's, etc.

This book is a very good introduction on the subject, but if you're looking for a more advanced information about it, try Understanding DSP from the same author. I recommend this book if Dsp is

completely new to you.

The book was a little more basic than I realized but good to use if you for a refresher. I purchased the book for my Kindle and the digital format was as expected.

I highly recommend this book and give it five stars without reservation. Lyons and Fugal have written and illustrated an excellent book that gives readers a non-mathematical introduction to signal processing. No calculator or spreadsheet needed. I recommend this book particularly for engineers, technicians, students, hobbyists and even non-technical people. Readers will learn how analog and digital signals undergo processing in circuits or software, how to filter signals, how to separate and measure frequency components, and how devices convert information from the digital to the analog domain and vice versa. Four appendices offer information about how to use scientific-notation to represent values, the various binary-numbering systems, along with the decibels unit and how it will represent power and signal amplitude. An appendix about AM and FM radio signals and a thorough glossary wrap up the book. For readers who want more information, I also highly recommend Lyons' book, "Understanding Digital Signal Processing," 3rd edition. I am not a confirmed buyer of this book. I received a review copy from the publisher.

I love the way the information is presented, in a smart and logical fashion.

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