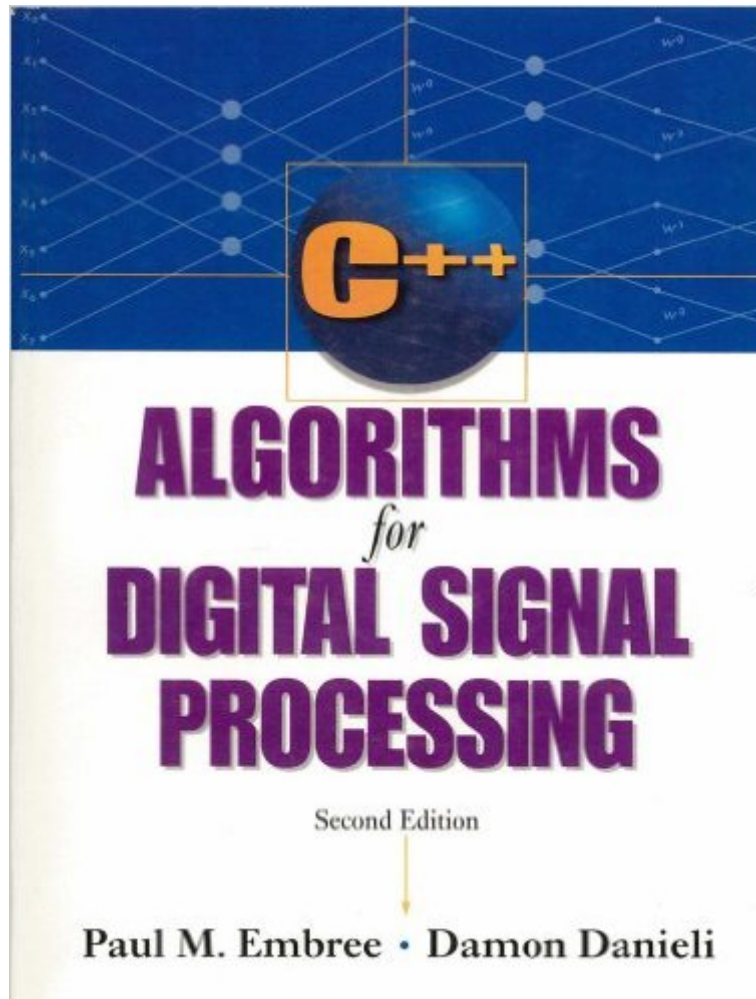# C++ Algorithms For Digital Signal Processing (2nd Edition)

Synopsis

Bring the power and flexibility of C++ to all your DSP applications The multimedia revolution has created hundreds of new uses for Digital Signal Processing, but most software guides have continued to focus on outdated languages such as FORTRAN and Pascal for managing new applications. Now C++ Algorithms for Digital Signal Processing applies object-oriented techniques to this growing field with software you can implement on your desktop PC. C++ Algorithms for Digital Signal Processing's programming methods can be used for applications as diverse as: Digital audio and video Speech and image processing Digital communications Radar, sonar, and ultrasound signal processing   Complete coverage is provided, including: Overviews of DSP and C++ Hands-on study with dozens of exercises Extensive library of customizable source code Import and Export of Microsoft WAV and Matlab data files   Multimedia professionals, managers, and even advanced hobbyists will appreciate C++ Algorithms for Digital Signal Processing as much as students, engineers, and programmers. It's the ideal bridge between programming and signal processing, and a valuable reference for experts in either field. Â Source code for all of the DSP programs and DSP data associated with the examples discussed in this book andÂ Appendix B and the file README.TXT which provide more information about how to compile and run the programs can be downloaded from www.informit.com/title/9780131791442

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Customer Reviews

The title promises a lot. But it doesn't deliver. This book is muddled and confused. It begins with a

rather high browed treatment of the maths behind DSP then goes on to attempt to provide examples in C++. The examples are poor and unclear. The supplied code compiles under VC++ but not under any other platform without substantial reworking.Over 100 pages of this 500 page book are devoted to a general discussion of the C++ language. Why? If I wanted this type of material I would consult my C++ manual. Here are C++ programmers who want to tell us the do's and don't's of the language, that feel the need to test newed pointers for NULL after allocating and before deleting!As far as the rest of the book is concerned I found the examples and text unclear, pedantic and frankly quite useless. I will keep my copy only because I want to use the theoretical material. But this material was written for maths graduates - pages upon pages of proofs and derivations that provide little insight into the underlying principles and serve nothing. Hold off and buy something more usable.

I am a computer scientist and I am trying to learn DSP.I thought getting this book would help me with this process, because it seemed to be a book for computer scientists but it is not.==This book is intended for those who are already familiar with DSP and want to explore C++.==If you are a computer scientist and aren't familiar with DSP you will need another book to understand the DSP side of the book.I got the book with no CD. That was very frustrating. Customer support was really bad. Make sure you get one with a CD.Once I got the code (I found it on an ftp server somewhere, so I don't know if it is the latest disc, maybe there is a better updated one),I had to change many things. The main problems where:The majority of projects don't compile in Visual Studio 2008.The author uses PRE-STANDARD C++. This means that many things he uses don't exist today:+flags like fstream nocreate don't exist today+Include preprocessor directives with .h extensions will force you to rewrite things.+I went through hell to fix(BYTE) errors.+Some for loops miss variable type declaration.All in all, this book is completely outdated in the programming side, and very confusing in the theoretical side.

A well written book good for both introduction to DSP and for advanced users. The CD has lots of C++ code written for the Windows environment which I find easier and much quicker to prototype DSP apps than using simulation languages or mathematics packages. The CD is well worth the price of the book. The code can read and write .wav files and includes a plotting application which is ok.

Lots of practical code examples. Practical filtering routines and example code.Includes a general

introduction to C /C++ concepts frequently used in DSP algorithm development. A good introduction to image processing is included. The DSP function library and sample code is perhaps the best part of the book.

This book is rather well written. I have read both the C++ and C versions. The contents of both books are more or less the same, just the difference in the C language used. Source Codes provided compiled neatly without and need for modification, which is really cool. However, the image files provided are really puzzling. The book says the images are in a DSP data format. So far I can only get the programs to work on the 2 images (.dat) provided. I tried using other .dat images from the net, and many other formats, including monochromatic raw images, but it wouldn't work. Another reason I only gave 3 stars is because the book doesn't provide any online help or an email of the authors. Personally I feel that this book is more for professionals who is already trained in DSP.

Errors logically a bit.But if one catches the intention, such a good introduction for DSP Programmers.Kindle version includes further technical errors, but it is under maintenance by my request.New version is expected soon enough.

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