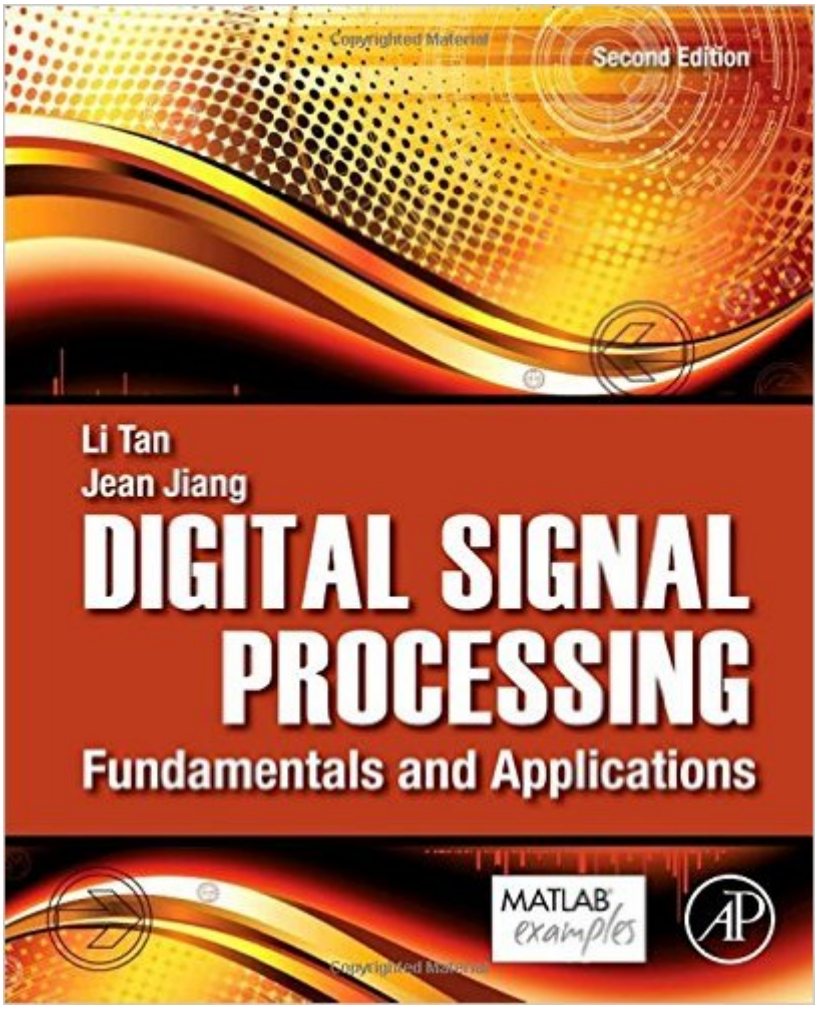
Digital Signal Processing, Second Edition: Fundamentals And Applications



Synopsis

Digital Signal Processing, Second Edition enables electrical engineers and technicians in the fields of biomedical, computer, and electronics engineering to master the essential fundamentals of DSP principles and practice. Many instructive worked examples are used to illustrate the material, and the use of mathematics is minimized for easier grasp of concepts. As such, this title is also useful to undergraduates in electrical engineering, and as a reference for science students and practicing engineers. The book goes beyond DSP theory, to show implementation of algorithms in hardware and software. Additional topics covered include adaptive filtering with noise reduction and echo cancellations, speech compression, signal sampling, digital filter realizations, filter design, multimedia applications, over-sampling, etc. More advanced topics are also covered, such as adaptive filters, speech compression such as PCM, u-law, ADPCM, and multi-rate DSP and over-sampling ADC. New to this edition: MATLAB projects dealing with practical applications added throughout the bookNew chapter (chapter 13) covering sub-band coding and wavelet transforms, methods that have become popular in the DSP fieldNew applications included in many chapters, including applications of DFT to seismic signals, electrocardiography data, and vibration signalsAll real-time C programs revised for the TMS320C6713 DSKCovers DSP principles with emphasis on communications and control applicationsChapter objectives, worked examples, and end-of-chapter exercises aid the reader in grasping key concepts and solving related problemsWebsite with MATLAB programs for simulation and C programs for real-time DSP

Book Information

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Customer Reviews

I bought this book brand new due to the fact that I was taking the author's DSP class. The book is VERY informative and very easy to read and provides very good examples. The only issue I had with this book is that the binding started to break down after a couple weeks of use. Other than the book binding, I cannot recommend this book highly enough!

Very good for communication engineers.

Thanks

Digital Signal Processing with Examples in MATLABÂ®, Second Edition (Electrical Engineering & Applied Signal Processing Series) Multidimensional Digital Signal Processing (Prentice-Hall Signal Processing Series) Digital Signal Processing: with Selected Topics: Adaptive Systems, Time-Frequency Analysis, Sparse Signal Processing Digital Signal Processing, Second Edition: Fundamentals and Applications Bayesian Signal Processing: Classical, Modern and Particle Filtering Methods (Adaptive and Cognitive Dynamic Systems: Signal Processing, Learning, Communications and Control) Discrete-Time Signal Processing (3rd Edition) (Prentice-Hall Signal Processing Series) Signal Processing Algorithms in Fortran and C (Prentice-Hall Signal Processing Series) Digital Signal Processing: Fundamentals and Applications LabVIEW Digital Signal Processing: and Digital Communications Fundamentals of Digital Signal Processing Fundamentals of Digital Signal Processing Using MATLAB Digital Signal Processing: Principles, Algorithms and Applications (3rd Edition) Applications of Digital Signal Processing to Audio and Acoustics (The Springer International Series in Engineering and Computer Science) Digital Signal Processing: Principles, Algorithms and Applications Real-Time Digital Signal Processing: Implementations and Applications Rocket Science for Traders: Digital Signal Processing Applications Practical Applications in Digital Signal Processing Digital Signal Processing Applications With Motorola's DSP56002 Processor Real Time Digital Signal Processing Applications With Motorola's Dsp56000 Family Analog and Digital Signal Processing:2nd (Second) edition