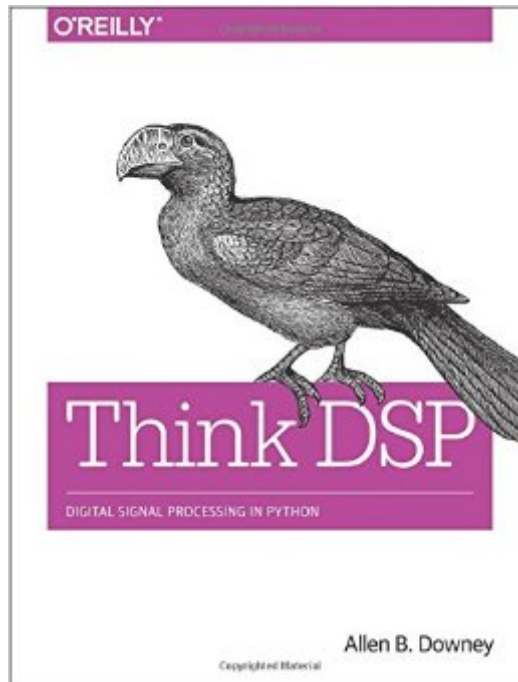


The book was found

Think DSP: Digital Signal Processing In Python



Synopsis

If you understand basic mathematics and know how to program with Python, youâ™re ready to dive into signal processing. While most resources start with theory to teach this complex subject, this practical book introduces techniques by showing you how theyâ™re applied in the real world. In the first chapter alone, youâ™ll be able to decompose a sound into its harmonics, modify the harmonics, and generate new sounds. Author Allen Downey explains techniques such as spectral decomposition, filtering, convolution, and the Fast Fourier Transform. This book also provides exercises and code examples to help you understand the material. Youâ™ll explore:

- Periodic signals and their spectrums
- Harmonic structure of simple waveforms
- Chirps and other sounds whose spectrum changes over time
- Noise signals and natural sources of noise
- The autocorrelation function for estimating pitch
- The discrete cosine transform (DCT) for compression
- The Fast Fourier Transform for spectral analysis
- Relating operations in time to filters in the frequency domain
- Linear time-invariant (LTI) system theory
- Amplitude modulation (AM) used in radio

Other books in this series include Think Stats and Think Bayes, also by Allen Downey.

Book Information

Paperback: 168 pages

Publisher: O'Reilly Media; 1 edition (August 4, 2016)

Language: English

ISBN-10: 1491938455

ISBN-13: 978-1491938454

Product Dimensions: 7.1 x 0.3 x 9 inches

Shipping Weight: 11.2 ounces (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #78,954 in Books (See Top 100 in Books) #3 inÂ Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > DSPs #4 inÂ Books > Engineering & Transportation > Engineering > Telecommunications & Sensors > Signal Processing #99 inÂ Books > Computers & Technology > Programming > Languages & Tools > Python

[Download to continue reading...](#)

Think DSP: Digital Signal Processing in Python PYTHON: Python in 8 Hours, For Beginners, Learn Python Fast! A Smart Way to Learn Python, Plain & Simple, Learn Python Programming Language in Easy Steps, A Beginner's Guide, Start Coding Today! Programming Raspberry Pi 3: Getting Started With Python (Programming Raspberry Pi 3, Raspberry Pi 3 User Guide, Python

Programming, Raspberry Pi 3 with Python Programming) Big Data, MapReduce, Hadoop, and Spark with Python: Master Big Data Analytics and Data Wrangling with MapReduce Fundamentals using Hadoop, Spark, and Python Python : The Ultimate Python Quickstart Guide - From Beginner To Expert (Hands On Projects, Machine Learning, Learn Coding Fast, Learning code, Database) Hacking: Hacking Made Easy 1: Beginners: Python: Python Programming For Beginners, Computer Science, Computer Programming Python: Complete Crash Course for Becoming an Expert in Python Programming (2nd Edition) Mobile Apps: Python and HTML: Programming Guide: Learn In A Day (Python, Swift, HTML, Apps) Python: Python Made Easy 1: Hacking: Beginners Python: A Beginner to Expert Guide to Learning the basics of Python Programming (Computer Science Series) Python: Ultimate Crash Course to Learn It Well and Become an Expert in Python Programming (Hands-on Project, Learn Coding Fast, Machine Learning, Data Science) Python: Practical Python Programming For Beginners and Experts (Beginner Guide) Swift and Python Programming Guide: Programming Language For Beginners: Learn in a Day! Box Set Collection (Swift, Python, JAVA, C++, PHP) Understanding Digital Signal Processing Digital Signal Processing in Communications Systems Accurate Sound Reproduction Using DSP Materials Processing: A Unified Approach to Processing of Metals, Ceramics and Polymers Mastering Social Media Mining with Python Advanced Machine Learning with Python Raspberry Pi 3: A Simple Guide to Help You Get the Most Out of Your Raspberry Pi 3 (Raspberry Pi, Python, Raspberry Pi 2, Perl, Programming, Raspberry Pi 3, Ruby)

[Dmca](#)