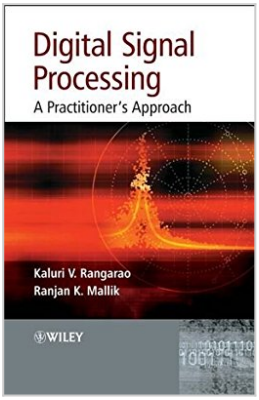

Digital Signal Processing: A Practitioner's Approach

By Kaluri V. Rangarao, Ranjan K. Mallik

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Digital signal processing is essential for improving the accuracy and reliability of a range of engineering systems, including communications, networking, and audio and video applications. Using a combination of programming and mathematical techniques, it clarifies, or standardizes the levels or states of a signal, in order to meet the demands of designing high performance digital hardware.

Written by authors with a wealth of practical experience working with digital signal processing, this text is an excellent step-by-step guide for practitioners and researchers needing to understand and quickly implement the technology. Split into six, self-contained chapters, *Digital Signal Processing: A Practitioner's Approach* covers:

- basic principles of signal processing such as linearity, stability, convolution, time and frequency domains, and noise;
- descriptions of digital filters and their realization, including fixed point implementation, pipelining, and field programmable gate array (FGPA) implementation;
- Fourier transforms, especially discrete (DFT), and fast Fourier transforms (FFT);
- case studies demonstrating difference equations, direction of arrival (DoA), and electronic rotating elements, and MATLAB programs to accompany each chapter.

A valuable reference for engineers developing digital signal processing applications, this book is also a useful resource for electrical and computer engineering graduates taking courses in signal processing.

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Editorial Review

From the Back Cover
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