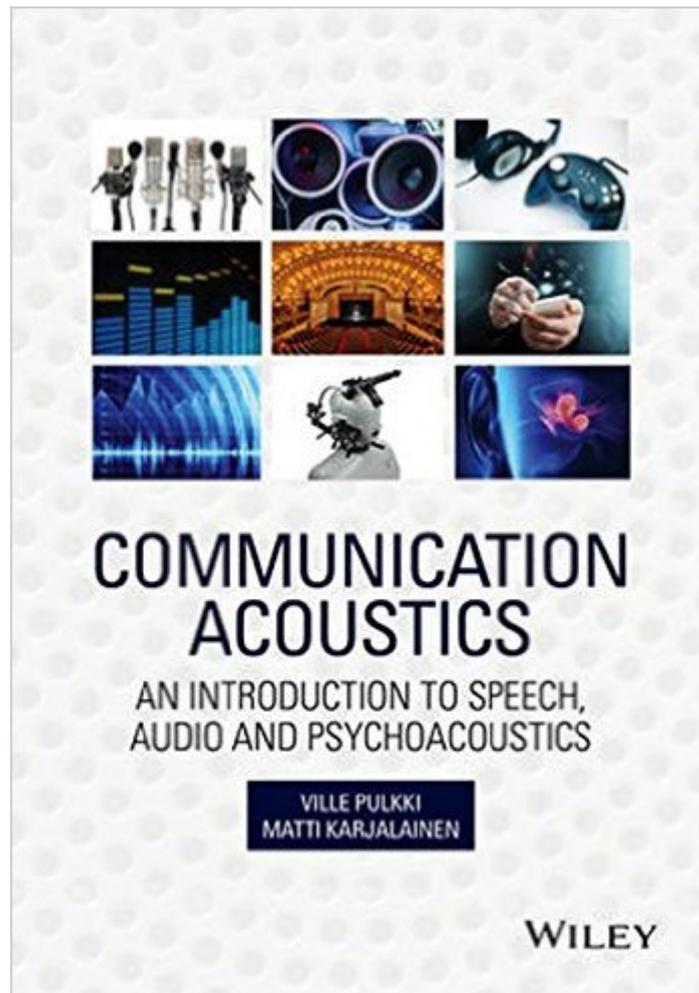


The book was found

Communication Acoustics: An Introduction To Speech, Audio And Psychoacoustics



Synopsis

In communication acoustics, the communication channel consists of a sound source, a channel (acoustic and/or electric) and finally the receiver: the human auditory system, a complex and intricate system that shapes the way sound is heard. Thus, when developing techniques in communication acoustics, such as in speech, audio and aided hearing, it is important to understand the time-frequency-space resolution of hearing. This book facilitates the reader's understanding and development of speech and audio techniques based on our knowledge of the auditory perceptual mechanisms by introducing the physical, signal-processing and psychophysical background to communication acoustics. It then provides a detailed explanation of sound technologies where a human listener is involved, including audio and speech techniques, sound quality measurement, hearing aids and audiology. Key features: Explains perceptually-based audio: the authors take a detailed but accessible engineering perspective on sound and hearing with a focus on the human place in the audio communications signal chain, from psychoacoustics and audiology to optimizing digital signal processing for human listening. Presents a wide overview of speech, from the human production of speech sounds and basics of phonetics to major speech technologies, recognition and synthesis of speech and methods for speech quality evaluation. Includes MATLAB examples that serve as an excellent basis for the reader's own investigations into communication acoustics interaction schemes which intuitively combine touch, vision and voice for lifelike interactions.

Book Information

Hardcover: 454 pages

Publisher: Wiley; 1 edition (January 27, 2015)

Language: English

ISBN-10: 1118866541

ISBN-13: 978-1118866542

Product Dimensions: 7.1 x 1.1 x 10 inches

Shipping Weight: 1.8 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars [See all reviews](#) (1 customer review)

Best Sellers Rank: #1,779,957 in Books (See Top 100 in Books) #264 in [Books > Engineering & Transportation > Engineering > Telecommunications & Sensors > Signal Processing](#) #643

[in Books > Engineering & Transportation > Engineering > Civil & Environmental > Acoustics](#) #917

[in Books > Science & Math > Physics > Acoustics & Sound](#)

Customer Reviews

An excellent book on audio engineering, highly recommend for engineering students who want to learn audio and speech processing in an easy-to-follow approach. The authors present an excellent overview and balance of many state-of-the-art technologies in audio and speech, and students can benefit greatly from the companion web page.

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

Communication Acoustics: An Introduction to Speech, Audio and Psychoacoustics
Speech Therapy for Kids : Techniques and Parents Guide for Speech Therapy (speech therapy, speech therapy materials)
Speech and Audio Signal Processing: Processing and Perception of Speech and Music
Statistical Methods for Speech Recognition (Language, Speech, and Communication)
Applications of Digital Signal Processing to Audio and Acoustics (The Springer International Series in Engineering and Computer Science)
An Introduction to Environmental Biophysics (Modern Acoustics and Signal)
Speech After Stroke: A Manual for the Speech Pathologist and the Family Member
Father of the Bride Speech (The 7-STEP GUIDE to Writing a Sensational Wedding Speech & Toast Book 1)
Structural Acoustics: Deterministic and Random Phenomena
Room Acoustics, Fifth Edition
Musical Acoustics, 3rd Edition
Acoustics of Worship Spaces
Articulation and Phonological Disorders: Speech Sound Disorders in Children (7th Edition) (Allyn & Bacon Communication Sciences and Disorders)
Automatic Speech Recognition: A Deep Learning Approach (Signals and Communication Technology)
Location Audio Simplified: Capturing Your Audio... and Your Audience
Sum & Substance Audio on Securities Regulation with Summary Supplement (CD) (Sum and Substance Audio)
Audio Production and Critical Listening: Technical Ear Training (Audio Engineering Society Presents)
Physical Audio Signal Processing: for Virtual Musical Instruments and Digital Audio Effects
Principles of Digital Audio, Sixth Edition (Digital Video/Audio)
Designing Audio Effect Plug-Ins in C++: With Digital Audio Signal Processing Theory

[Dmca](#)