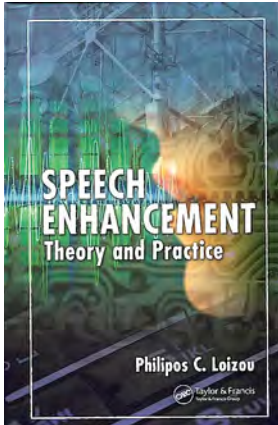


# Books and Publications

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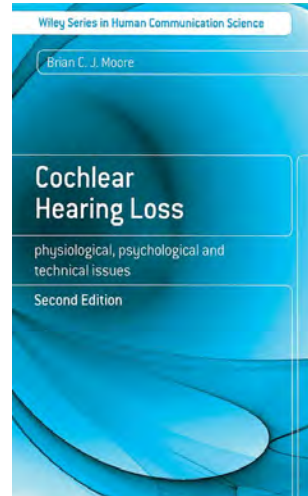


Book Title: *Speech Enhancement: Theory and Practice*  
Author: Philipos C. Loizou  
Publisher: CRC Press  
ISBN: 9780849350320  
Pages: 632  
Binding: Hardcover

This book provides comprehensive and up-to-date coverage of all major noise reduction and speech enhancement algorithms proposed in the last two decades. It covers traditional noise-reduc-

tion algorithms, such as spectral subtraction and Wiener filtering algorithms as well as state-of-the-art algorithms including minimum mean-squared error algorithms that incorporate signal-presence uncertainty and subspace algorithms that incorporate psychoacoustic models. The coverage includes objective and subjective measures used to evaluate speech quality and intelligibility.

Divided into three parts, the book presents the digital-signal processing and speech signal fundamentals needed to understand speech enhancement algorithms, the various classes of speech enhancement algorithms proposed over the last two decades, and the methods and measures used to evaluate the performance of speech enhancement algorithms. MATLAB implementations of all major noise reduction algorithms and a speech database (IEEE corpus) that can be used for evaluation of noise reduction algorithms are included in an accompanying DVD-ROM.



Book Title: *Cochlear Hearing Loss: Physiological, Psychological, and Technical Issues (Second Edition)*  
Author: Brian C. J. Moore  
Publisher: Wiley (Series in Human Communication Science)  
ISBN: 9780470516331  
Pages: 360  
Binding: Softcover

This book reviews the perceptual changes associated with cochlear hearing loss and relates these to the underlying physiological mechanisms. Its

main goal is to convey an understanding of the difficulties faced by the hearing-impaired person and of the limitations of current hearing aids. Topics covered include the physiology of the peripheral auditory system, absolute thresholds, frequency selectivity and masking, loudness perception, temporal resolution, pitch perception, sound localization and binaural processing, speech perception, and hearing aids. An extensive glossary is provided to give brief explanations of technical terms used in the book.

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