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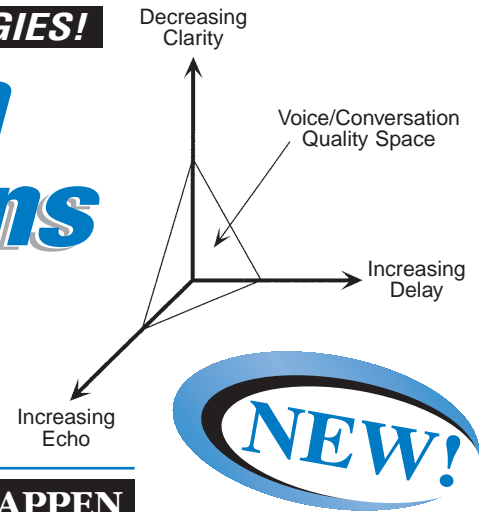
Edited by **Gillian Davis**

NOISE CANCELLATION TECHNOLOGIES (EUROPE) LTD, CAMBRIDGE, UK

A volume in the Electrical Engineering and Applied Signal Processing series

Series edited by Alexander Poularikas

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WHAT CAN BE ACHIEVED AND HOW TO MAKE IT HAPPEN

Noise and distortion that degrade the quality of speech signals can come from any number of sources. The technology and techniques for dealing with noise are almost as numerous, but it is only recently, with the development of inexpensive digital signal processing hardware, that the implementation of the technology has become practical.

Noise Reduction in Speech Applications provides a comprehensive introduction to modern techniques for removing or reducing background noise from a range of speech-related applications. Self-contained, it starts with a tutorial-style chapter of background material, then focuses on system aspects, digital algorithms, and implementation. The final section explores a variety of applications and demonstrates to potential users of the technology the results possible with the noise reduction techniques presented.

The book offers chapters contributed by international experts, a practical, systems approach, and numerous references. For electrical, acoustics, signal processing, communications, and bioengineers, **Noise Reduction in Speech Applications** is a valuable resource that shows you how to decide whether noise reduction will solve problems in your own systems and how to make the best use of the technologies available.

FEATURES

- Takes a systems approach that enables readers to better understand how to select the most appropriate technique to use in a given situation
- Includes tutorial material providing background on digital signal processing techniques and noise in digital speech communication systems
- Helps readers decide which, if any, noise reduction technique is appropriate for their own systems and how to make the best use of the available technologies
- Examines single channel speech enhancers, microphone arrays, and echo canceller noise reduction algorithms in detail
- Looks at the issues related to a range of applications and the results achievable with noise reduction techniques
- Provides audio wavefiles on the Web and example code that illustrate noise problems and solutions

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