Implementation of WT and Neural Networks Algorithms for Speech Signal Denoising Optimization

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Abstract: With the advent of consumer mobile telecommunications, the need to improve sound recording, including reducing noise annoyance, has become more prevalent. Nowadays, denoising methods are numerous; the majority of these methods include assumptions about the original signal as well as noise. The choice between these denoising techniques depends on the available data and the characteristics of the signal carrying the information. For this article, we have chosen to compare two methods: the wavelet transform and the neural networks. The goal is to choose the best method that would allow us to optimize the reconstruction of speech signal as close as possible to the original in terms of SNR improvement.

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