



Speech Enhancement

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Introduction

- ❏ Speech enhancement is concerned with improving some perceptual aspect of speech that has been degraded by **additive noise**.(Loizou, 2007).
- ❏ Enhancement means the improvement in the value or quality of something. When applied to speech, this simply means the improvement in **intelligibility** and/or **quality** of a degraded speech signal by using signal processing tools. (Benesty et al.2005).



Introduction

Usage:

-  Hands-free communications
-  VoIP
-  Hearing aids
-  Telecommunications
-  Speech recognition
-  Multiparty conferencing
-  etc...



Introduction

👂 Algorithms:

- 👂 **Spectral-Subtraction Algorithm**

- 👂 **Statistical-Model-Based Algorithm**

- 👂 Subspace Algorithm

👂 Evaluation Methods:

- 👂 Objective

- 👂 Subjective

