

Abstract: Voice Activity Detection Using Global Speech Absence Probability Based on Teager Energy for Speech Enhancement

Yun-Sik PARK, Ji-hyun Song, Youngrok Song, Sangmin LEE
*Department of Electronic Engineering,
Inha University, Incheon, Korea*
*p980891@nate.com, neverjin0109@naver.com, gateway32@inha.ac.kr,
sanglee@inha.ac.kr*

Abstract

In this paper, we propose a novel voice activity detection (VAD) algorithm using global speech absence probability (GSAP) based on Teager energy (TE) for speech enhancement. The proposed method provides a better representation of GSAP, resulting in improved decision performance for speech and noise segments by the use of a TE operator which is employed to suppress the influence of a noise signal. The performance of our approach is evaluated by objective tests under various environments, and it is found that the suggested method yields better results than the conventional scheme.

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