



## Missing Feature Reconstruction of Speech Using Nonparametric Mixture of Factor Analyzers

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The performance of automatic speech recognition (ASR) systems is adversely affected by noise and a wide range of different algorithms has been proposed to cope with the effects of additive noise. Missing feature is one of recent approaches which utilize information redundancy in speech signal to estimate missing components. According to connection between missing feature approaches and new emerging compressive sensing theory, in this paper we try to adapt these two concepts and present a novel solution to missing feature problem. To do that, we use nonparametric mixture of factor analyzers (NMFA) to model clean spectrographic features. Then arrange the element of sensing matrix according to missing components and finally estimate them using NMFA model.