A NEW METHOD FOR ESTIMATING SCORE FUNCTION DIFFERENCE (SFD) AND ITS APPLICATION TO BLIND SOURCE SEPARATION (TueAmPO2)

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Abstract :

Score Function Difference (SFD) is a recently proposed ``gradient'' for mutual information which can be used in Blind Source Separation algorithms based on minimization of mutual information. To be applied to practical problems, SFD must be estimated from the data samples. In this paper, a new method for estimating SFD is proposed. To compare the performance of this new estimator with other proposed SFD estimation methods, we have applied them in separating linear instantaneous mixtures. It will be seen that our method performs superior to all other methods previously proposed for estimation of SFD.

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