Blind Detection of Independent Dynamic Components

In certain applications of independent component analysis (ICA) it is of interest to test hypotheses concerning the number of components or simply to test whether a given number of components is significant relative to a "white noise" null hypothesis. We estimate probabilities of such competing hypotheses for ICA based on dynamic decorrelation. The probabilities are evaluated in the so-called Bayesian information criterion approximation, however, they are able to detect the content of dynamic components as efficiently as an unbiased test set estimator.

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