Microsoft Research

ICML2015

International Conference on Machine Learning
July 6-11, 2015
Lille
France

Submission Summary

Paper ID: 2075

Title: Deterministic Independent Component Analysis

Abstract: We study independent component analysis with noisy observations. We present, for the first time in the literature, consistent, polynomial-time algorithms to recover non-Gaussian source signals and the mixing matrix with a reconstruction error that vanishes at a $1/\sqrt{T}$ rate using T observations and scales only polynomially with the natural parameters of the problem. Our algorithms and analysis also extend to deterministic source signals whose empirical distributions are approximately independent.

Created On: 2/6/2015 3:58:21 PM

Modified On: 5/18/2015 2:50:39 PM

Authors: Ruitong Huang , *ruitong@ualberta.ca*
Andras Gyorgy , *gyorgy@ualberta.ca*
Csaba Szepesvári , *szepesva@ualberta.ca*

Primary Contact: Ruitong Huang , *ruitong@ualberta.ca*

Uploaded Files:

File Name	File Size (in bytes)	Uploaded On
DICA.pdf	459572	5/18/2015 3:11:16 PM