

MS Thesis Defense

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Title: *An R Package for Fitting Dirichlet Process Mixtures of Multivariate Normal Distributions*

Abstract

We present an R package for user to do density estimation and clustering by Dirichlet process mixture model. In this package, by choosing conjugate priors, we implement a Gibbs sampling method for Dirichlet process mixture model with multivariate Normal mixture kernel. This article also provides mathematical background for the algorithm. In the end, we will perform real data analysis by using this package.