Dirichlet Models in SDA

Richard Emilion¹,*

1. University of Orléans
*Contact author: richard.emilion@univ-orleans.com

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SDA statistical units are described by probability distributions which can be estimated by standard kernel estimators from classes of data. In the case of a finite range variable, a model that generates such descriptors is Dirichlet distribution. In the multivariate general case, appropriated models are Dependent Dirichlet Processes or Dependent Polya Trees. Some questions concerning quantiles, copula-npEM algorithm, PCA, consistent estimators of mixture of distributions are solved and illustrated using real and simulated data.

References


