

PRINCETON UNIVERSITY
OPERATIONS RESEARCH & FINANCIAL ENGINEERING SEMINAR

Model Selection for Gaussian Mixture Models and Mixture of Factor Models

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Abstract:

A fundamental and challenging problem in the applications of mixture models is to make inference on the number of components. In this talk we focus on two mixture models, Gaussian mixture model and mixture of factor model, and propose penalized likelihood methods to select model and estimate parameters simultaneously. EM algorithms for efficient numerical computation are developed. The efficiency and usefulness of the proposed methods are illustrated by simulation studies and real data analysis.

Joint work with Heng Peng and Kun Zhang.

Tuesday, November 24, 2009
Sherrerd Hall, Room 101
4:30 PM