Purpose

Low-dim. feature extraction from mixed data types

Observation

Height  Age  Gender
1.62   15   M  • • •
1.76   26   M  • • •
1.55   38   F  • • •
• • •  • • •

Latent Variable

Real  Count  Binary

Approach

Modeling by exponential family with sparse priors
Synthetic Experiment Result

VPCA [1]
GLLVM [2]
SEPCA (proposed)

1 C. M. Bishop. Variational principal components. *ICANN ’99*