

Tutoring Session 10

Unsupervised learning

Problem 1: Derive the solution $\mathbf{W} = \mathbf{U}(\Sigma - \sigma^2 \mathbf{I})^{\frac{1}{2}}$ of PPCA.

Problem 2: Imputation in a Factor analysis model: Derive the expression for $p(x_h|x_v, \theta)$ for a FA model. x_v contains all visible data-dimensions while x_h contains all hidden ones.