Unsupervised Learning-Summary Sheet

ML@LSE

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Abstract

Objectives: Understand two important unsupervised learning methods: Principal Component Analysis and Clustering. Understand the difference between k-means clustering and Hierarchical Clustering.

Requirements: Introductory Bootcamp (you can read the slides if you didn't attend). Although not necessary, familiarity with notions of linear algebra may help: inner product and orthogonal projections. Strong understanding of the summation operator ($\sum_{i=1}^{n}, \sum_{j \in C}$) may help.

Keywords: PCA, Loading vector, Principal Components, Proportion of variance explained, Clustering, k-meanS Clustering, Within-cluster Variation, Hierarchical Clustering, Minimal Intercluster Dissimilarity, Dendrogram.