

Introduction

Data Mining

- Set of techniques for analyzing and describing structured data, for example finding patterns in large datasets.

Examples : Density estimation, unsupervised classification, clustering, principal component analysis, locally linear embedding.

Often interchanged with knowledge discovery. Traditionally deals with unsupervised learning techniques (referred to by statisticians as exploratory data analysis)

Machine Learning

- Umbrella term for a set of techniques for interpreting data by comparing them to models for data behavior.

Examples : regression methods, supervised classification methods, maximum likelihood estimators, Bayesian methods.

Also known as inference techniques, data-based statistical inferences or fitting. Emphasis has been on prediction of one variable based on the other variable, also known as supervised learning.

One-stop link for course content

- <http://www.astroml.org>
- Current course website
https://piazza.com/iit_hyderabad/spring2022/ep4130ph6130/info
- Google classroom to be used for uploading assignments he7ky6o