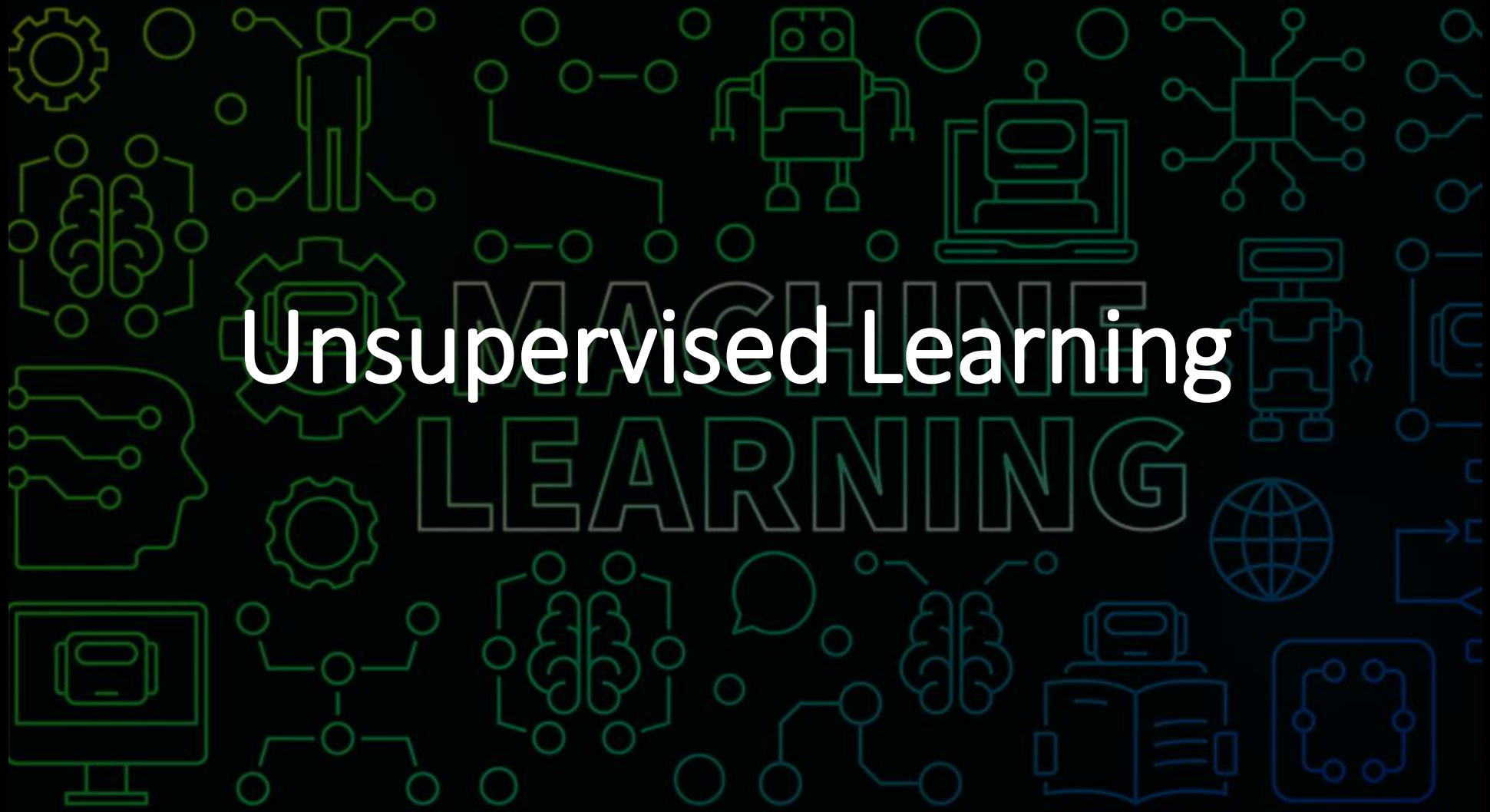
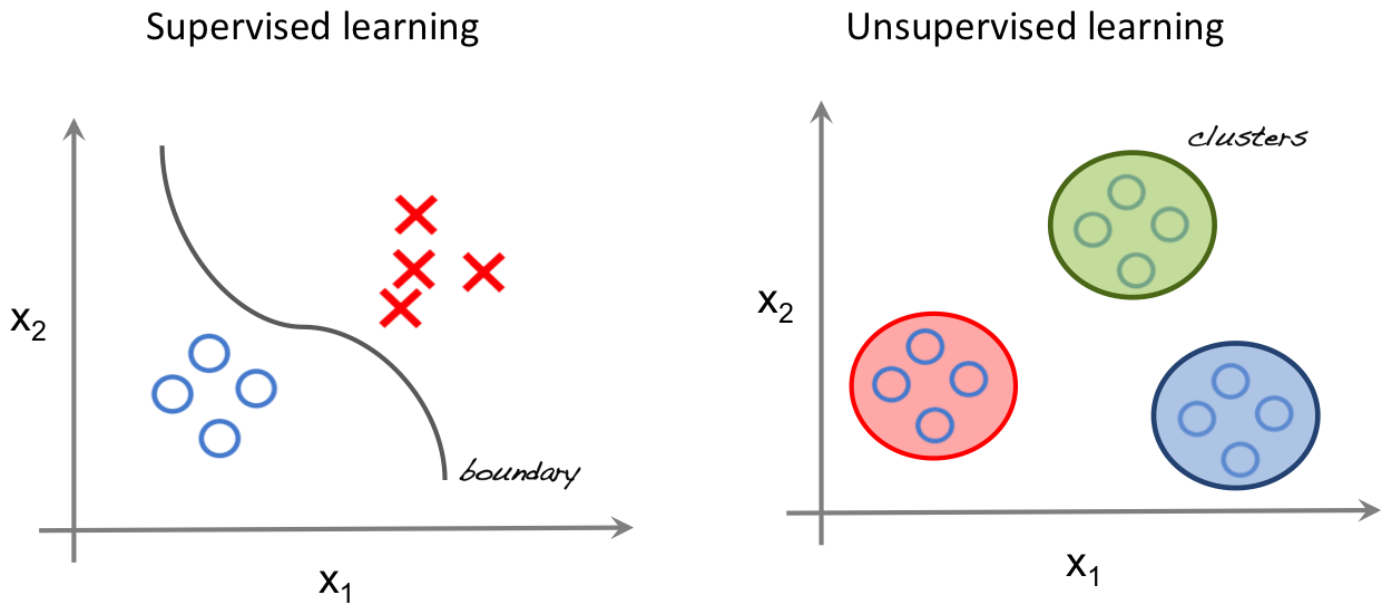


Unsupervised Learning

Unsupervised Learning

- Used when there is input data (X) and no corresponding output label (Y)
- Objective is to explore the data and find some pattern within
- Very useful when there is lot of data but few labels
- Example tasks such as association rule mining, clustering, compression, dimensionality reduction, data generation

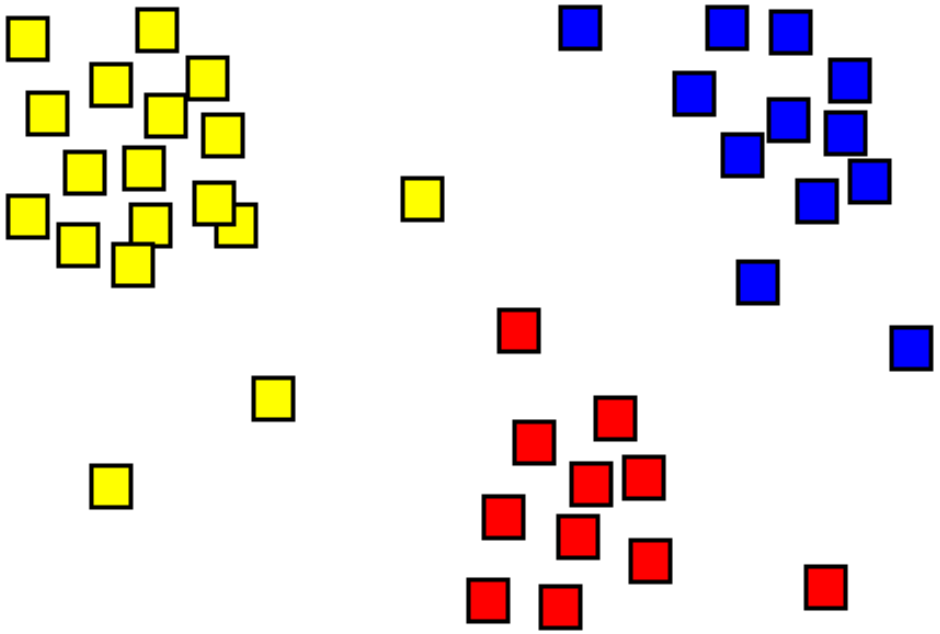


Applications of Unsupervised Learning

Association-Rule Mining

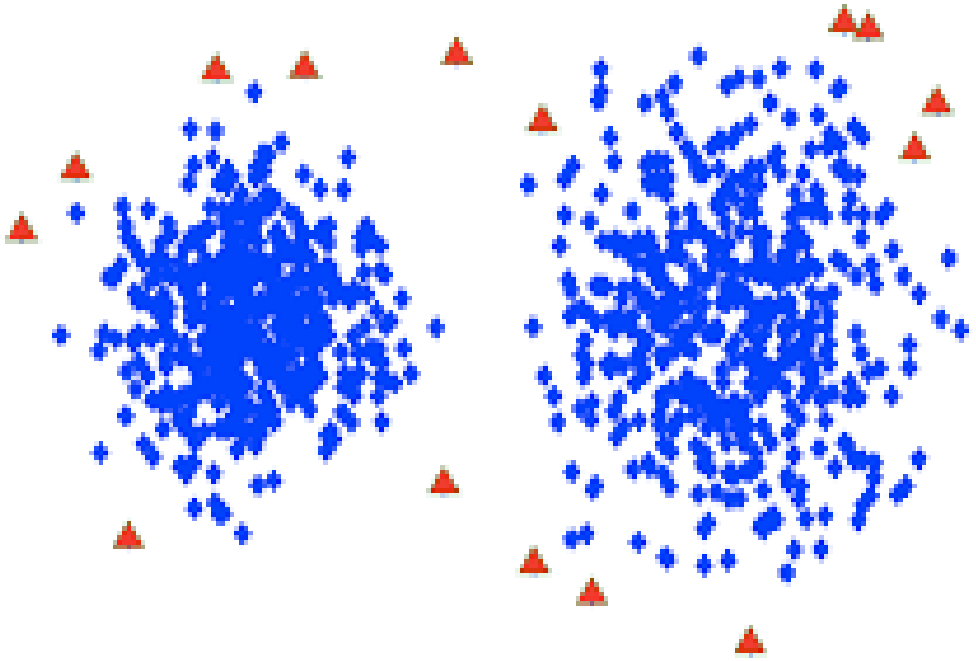
- Flagship of data mining
- What items are frequently bought together by customers?

Applications of Unsupervised Learning



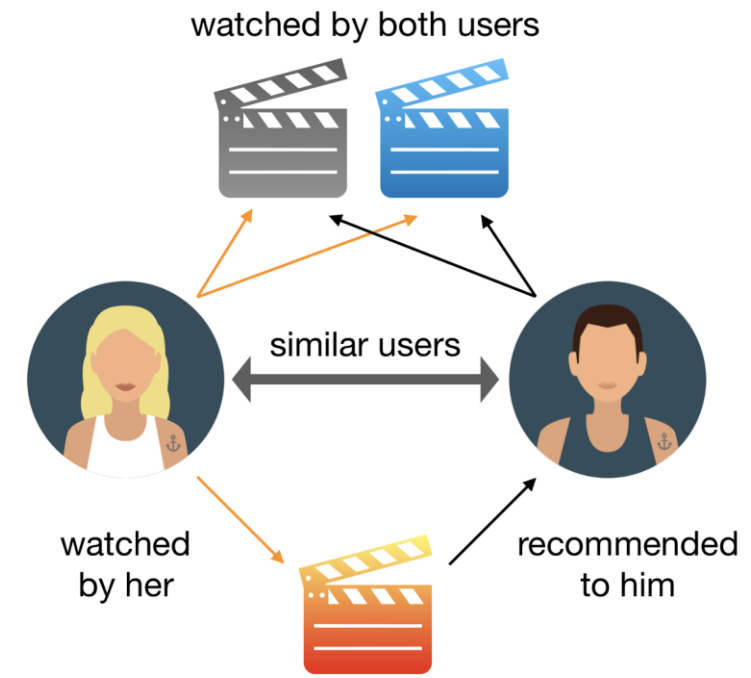
Clustering

Applications of Unsupervised Learning



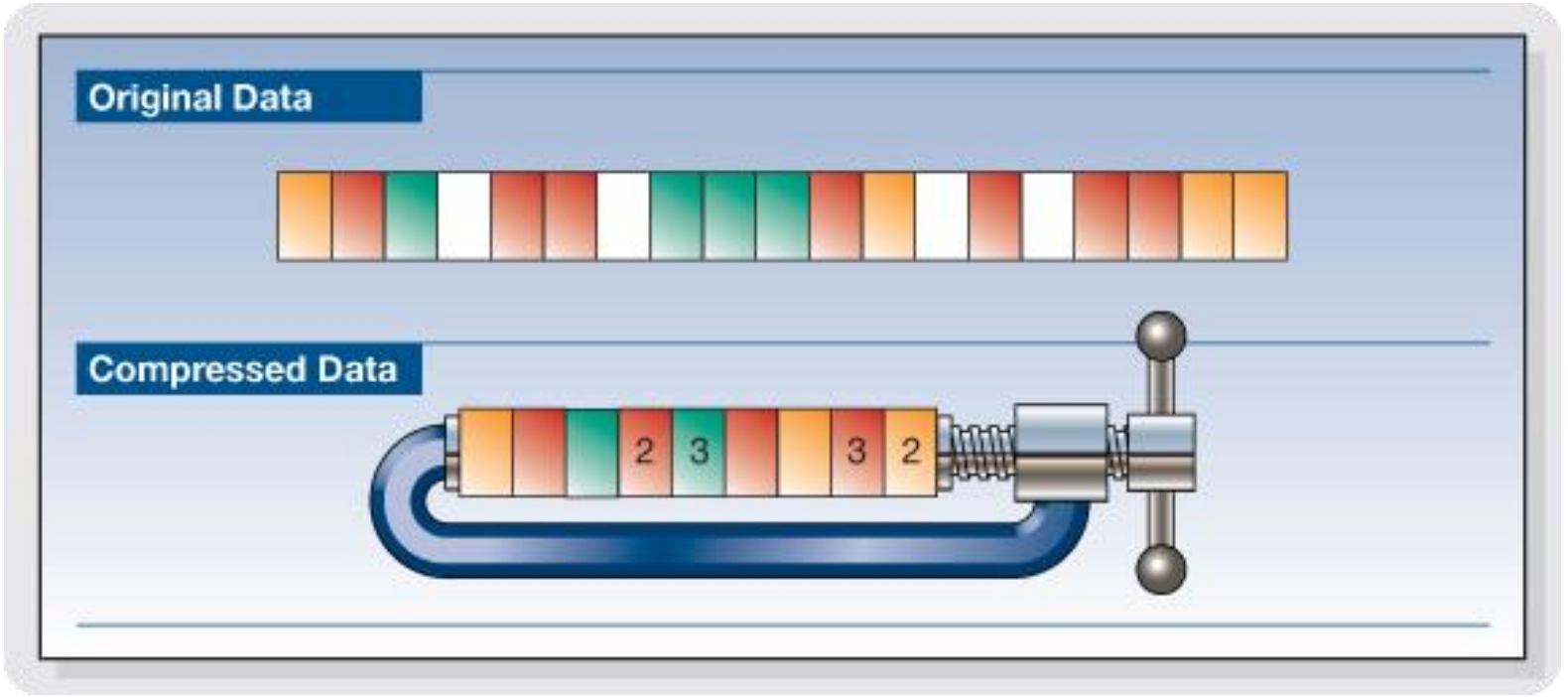
Anomaly Detection

Applications of Unsupervised Learning



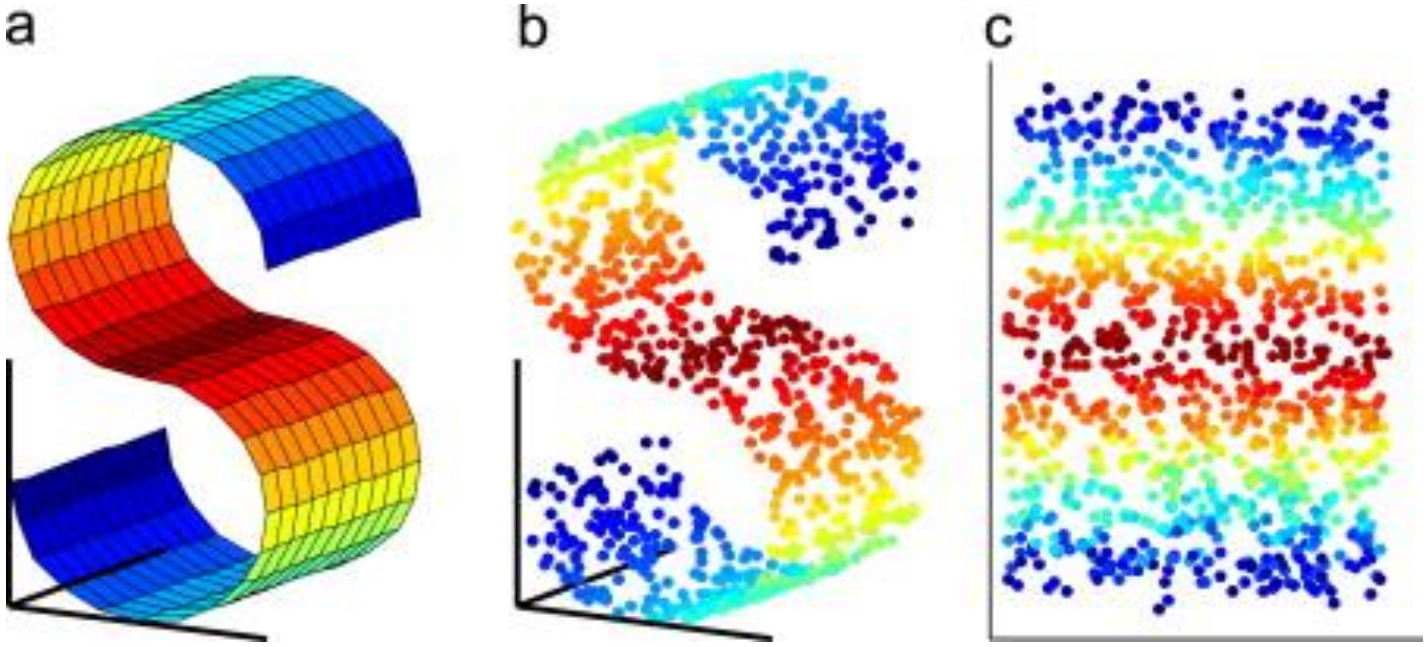
Recommender System

Applications of Unsupervised Learning



Data Compression

Applications of Unsupervised Learning



Dimensionality Reduction

Applications of Unsupervised Learning

Data Generation

Nandri Vanakkam !