

Machine Learning

Module 8.0 - Unsupervised Learning: introduction

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Spring 2026

Supervised vs unsupervised learning

Supervised learning aims to predict an outcome y from features x . The quality of the model can be inspected by comparing the predictions to the true outcomes.

Unsupervised learning aims to analyze the link between the features. There is no “supervisor”. Unsupervised methods can be separated in two main ones:

- **Clustering**: group instances according to their similarities across the features.
- **Dimension reduction**: link the features according to their similarities across the instances, find commonalities, and combine the features in fewer dimensions.