

Introduction to Machine Learning



En bref

- > **Langues d'enseignement:** Anglais
- > **Ouvert aux étudiants en échange:** Oui

Présentation

Description

The course initiates students to Machine Learning methods and their applications. The students will learn the different steps involved in the design of ML methods to answer questions from a dataset. Further, through formal definitions and a number of examples, students will see the differences between different models and learn when and how to apply them.

Objectifs

The core objective of the course is to initiate student to Machine Learning methods and their applications and initiates them to how to develop a model from scratch. At the end of the course, students should be capable of independently design models to answer questions given a dataset.

Heures d'enseignement

Introduction to Machine Learning - CM	Cours Magistral	10,5h
Introduction to Machine Learning - TD	Travaux Dirigés	12h

Pré-requis nécessaires

- * Programming in Python and its core data libraries (NumPy and Pandas)
- * Courses in probability and statistics

Plan du cours

- * Supervised and unsupervised methods
- * Linear regression
- * Logistic regression
- * Naive Bayes
- * Nearest Neighbor / Trees / Ensemble
- * Clustering
- * PCA
- * Deep learning

Compétences visées

- * Understand, clean, and prepare a dataset
- * Design features
- * Train and evaluate ML models

Infos pratiques

Contacts

Responsable du cours

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Lieux

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Campus

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