

Machine learning



ECTS
4 crédits



Hourly volume
82h

Introducing

Objectives

At the end of this module, the student will have understood and be able to explain (main concepts):

- Main concepts and risks of machine learning.
- Advanced methods of machine learning on vector data, requiring tuning effort and/or expert knowledge.
- Ethics of artificial intelligence.

At the end of this module, the student should be able to:

- Solve simple exercises about the underlying mathematical theory.
- Put in action the data science methodology on case studies with R and Python.
- Explain to non-experts the tuning choices in the algorithms.
- Criticize the assumptions and results, summarize the main conclusions.
- Detect legal defects (bias, discrimination) in the algorithms.

Practical info

Location(s)

 Toulouse

Necessary prerequisites

Course « Data science »

Course « Generalized linear model »