IA Frameworks (AIF)

ECTS
3 crédits

Hourly volume
37h

Introducing

Objectives

This course follows the Machine Learning and the High Dimensional & Deep Learning. At the end of this module, the student will be able to run efficiently these algorithms on various technology. It will also learn different algorithms on real dataset.

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

- Properties of container images.
- Properties of cloud computing.
- Main algorithms of Natural language processing. ((Cleaning, Vectorization, Word embedding)
- Reinforcement learning.
- Main recommendation system algorithm.

The student will be able to:
- Clean, prepare, transform (munging) big data within Python or Spark frameworks.
- Identify the right tool to analyse these big data (virtual machine ,container, gpus, etc..) on different use case.
- Identify the right algorithm according to the data (recommendation system, NLP, rreinforcement learning, cnn
- Execute, optimize, these methods and algorithms in the best adapted framework and validate their performances.
- Learn by himself and develop a use case for a recent technology of his choice.

Necessary prerequisites

Exploratory Data Analysis
Machine Learning / Deep Learning
R and Python languages

Practical info

Location(s)

Toulouse