

Description

To put their knowledge into practice, students must present an applied ML project. This group project must respond to a problem that we find in everyday life such as cybersecurity, medical imaging processing, natural language processing, IOT, finance, etc.... This practical approach will make it possible to assess the acquisition of the various skills necessary to solve an ML problem in a business.

Learning Objectives and Outcomes

- Put together practical and theoretical knowledge to solve a real-world problem.
- Know how to start a data analysis.
- Plan the steps of the project to create a baseline solution.
- Smart approach refinement from a baseline solution to reach higher model performance with the best reliability.
- Keep scientific approach and be able to justify the choices to explain success and/or failure.
- Know how to manage a datascience project from data exploration to go-live.

Course Schedule and Contents

This academic activity will be spread over a period of 9 months starting from the first day in the training. It will be divided into 3 main tasks:

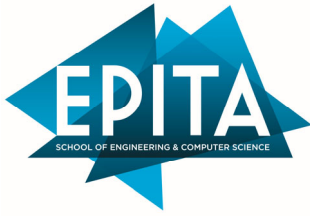
- Research and state of the art
- Establishment of the proof of concept
- Implantation and deployment

Below are some examples of projects that could be implemented in this course:

- Autonomous Car driving
- AI Video Games Playing
- Drone, Camera: Tracking, and video processing
- Speech, face, language and emotion recognition
- Text Summary Generator

Grading

- **State of the Art: 15%**



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- **Proof of concept: 20%**
 - **Realization: 65%**

Policies

- I expect you to turn-in your reports on time to receive proper credit/grade.
- Any work submitted must be your own.
- I expect everyone to contribute equally to group assignments
- Attendance in every class is expected and class participation and discussion is strongly encouraged.
- Late work will not be accepted unless prior arrangements have been made directly with me.
- Cases will be decided on an individual basis.

Good Luck!