Online Learning Applications

Introduction to the Course

Instructors

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Tentative program

- Introduction to online learning:
  - ▷ Stochastic and adversarial MAB
  - ▷ Expert problem
  - ▷ Online convex optimization
- Learning in pricing
- Matching and combinatorial bandits
- Advertising and learning with budget
- Non-stationary environments

Evaluation

The evaluation is composed by two parts:

Written Exam

- max 16 points
- Questions about theory

Project

- max 16 points
- Groups of at most 4-5 students
- The goal is to develop an algorithm for a complex problem
- Includes modeling and coding
- Presentation after the end of the course (July, September, December)
- Will start in the next months

Types of lectures

- Theory
- Laboratory

Types of lectures

- Theory
- Laboratory
- Questions about the project (after the start of the project)