

Semester S8	ENSEA	New !
	Artificial Intelligence and Big Data	
US Credits : 3	Lecture : 36h, Laboratory 28h	Language : English

Summary

This course is an introduction to artificial intelligence and its application to the processing of big quantities of data. Classification and prediction questions will be studied through different AI methods in order to find solutions for automatic image indexation or for recommendation systems.

Prerequisites

- Programming skills (Python language)
- Linear Algebra
- Basic Probability and Statistics

Contents

- Data mining, introduction to data bases
- Statistical learning, linear classifier, neuron networks, decision trees
- Introduction to deep learning
- Visual recognition, image interpretation
- Recommendation systems, user profile generation

Textbook

- Deep Learning, Ian Goodfellow and Yoshua Bengio and Aaron Courville, MIT Press, 2016, <http://www.deeplearningbook.org>
- Pattern Recognition and Machine Learning, Christopher Bishop, Information Science and Statistics, 2006

Similar to the following courses

- IIT Chicago
- University at Buffalo
- University of Pittsburgh
- University of Illinois at Urbana-Champaign
- Mississippi State University
- University of Michigan at AA
- Michigan Tech