# **Data Mining**

# Supervised Machine Learning

Lecture #1 – General Introduction



#### Introduction

Course instructor: Ass. Pr. Axel Carlier Axel. Carlier@enseeiht.fr

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## Introduction from you

- Name
- Nickname
- Brief bio
- What do you expect from this class?



## Course goals

- What is Machine Learning? And why is it very useful in Data Mining
- Introducing the problem of classification
- Introducing Multi-Layer Perceptrons and Convolutional Neural Networks



## Logistics

- Class from Monday to Friday evenings and Saturday morning.
- Each class will be divided into theoretical and practical sessions (~2h each)
- You are expected to write a technical report of the labs and return it to me, along with your code, before December 31st midnight.



# Grading

- Final exam (50%)
- Report and code from labs (50%)

- No plagiarism tolerated
- No late policy



#### Course overview

- Introduction
- Neural Networks, Multi-Layer Perceptrons
- Gradient Descent and back-propagation
- Regularization and Evaluation
- Convolutional Neural Networks
- An insight about Deep Learning



# Questions at this point

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