

Deep Learning

Computer Science Master Degree

An introduction to the course

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Who we are



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Rules of the game

Credits 9 CFU Computer Science

6 CFU Math

5 CFU Electronic Engineering

← Drop me a line if you are here

Classes Wed 11-13 (710)

Thu 9-11 (711)

Fri 9-11 (710/SW2)



Objectives

- Providing an overview of principles behind neural networks and deep architectures,
 providing an overview of classical and recent approaches
- Hands-on activities will allow us to practice the use of neural networks,
 complementing the theoretical classes
- Students will deepen their capability of critically analysing the results
- Your main goal: UNDERSTAND!!

Prerequisite

- Machine Learning
- Programming (Python)



[Tentative] schedule

W1-W2 Refresh on NNs and CNNs, model selection, a taxonomy of representation learning and transfer learning

W3-W4-W5 Representation learning and transfer learning

W6-W7 Deep networks for sequential data

W8 Diffusion models

W9 Deep networks for graphs

W10-W13 Project



Rules of the game (exam)

The final exam is project+oral

Oral includes

- Discussion of the project → Details will be shared in due time, we will provide main topics and guidelines
- A question (on topics not covered by the project)

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