

# Learning with Artificial Neural Networks

## Practical Work 02 – Artificial Neural Networks

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### Goals:

- Learning about backpropagation.
- Learning how to use Keras to create an MLP and refreshing knowledge on cross-validation.

### 1. Notebooks

Download the notebook material from the Cyberlearn platform

### 2. Backpropagation & Keras

Read each notebook material (see list below), follow the instructions, play with the code, program the solutions to the proposed problems and answer the questions.

List of notebooks associated with this exercise:

- 4\_backpropagation.ipynb
- 5\_mlp\_keras.ipynb

### Report

There is no report but doing this practical work is important as it will allow you to better understand the concepts and get an intuition of the working of the Backpropagation algorithm, Multi-Layer Perceptron (MLP) and Keras.