

[Pre-Lab] Feedforward Neural Network (FFNN)

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Due: Before the start of the coming lab session.

Remark:

- Only groups of two or three people accepted (preferably three). Forbidden groups of fewer or larger number of people.
 - Do the below tasks in order so that you can work efficiently during the coming two-hour lab session.
 - No plagiarism. If plagiarism happens, both the “lender” and the “borrower” will have a zero.
 - Code yourself from scratch. No lab work will be considered if you solve the problem using any ML library.
 - Do thoroughly all the demanded tasks.
 - Study the theory for the questions.
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1 Tasks

1. Download the data stored in the file `data_ffnn_3classes.txt` available on the course website. This dataset consists of three columns: x_1 , x_2 and y . Notice that this is a multi-class problem (in particular 3 classes).
2. For at least one iteration, implement the forward propagation of a feedforward neural network (FFNN) consisting of three layers, in which the hidden layer has K neurons (at your choice). Remember you need to arrive to show the error results. Use all the data available in the file as training examples.

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