Sapienza University of Rome, Italy
Master in Artificial Intelligence and Robotics
Machine Learning (2018/19)

Exercise 7. Feedforward Networks examples

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1. Download and install the following software packages

- Python 3
- Tensorflow `https://www.tensorflow.org/`
- Keras `https://keras.io/`

2. Run the examples in `keras_exercise.zip` (follow instructions in the `README` file)

3. Run the examples with different parameters (random seed number, learning rate) to understand its impact on the solution and on time to converge.

4. Invent a new problem with non-linearly separable data (see examples in the `datasets` folder) and study the learning process in this new problem, possibly change the network layout.

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Learning goals

- Installing libraries for neural network computation
- Understanding FNN learning and FNN configurations
- Understanding parameter influence on result and convergence time
- Define and solve a simple problem with FNN