

Sapienza University of Rome, Italy
Master in Artificial Intelligence and Robotics
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Exercise 3. Linear classification

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Exercise 3. Linear Classification

- Download the Python code for linear classification
- Install libraries and run the `main.py` script (use option `-h` for help)
- Run experiments with different classifiers and presence of outliers
- Understand robustness to outliers
- For the SimplePerceptron model, understand the effect of the `eta` and `niter` parameters
- Look into the code and modify it to consider other study cases (e.g., increase the variance in the generation of the data set to generate non-linearly separable data).

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Learning goals

- Understanding how linear classifiers work and the problem of outliers
- Running experimental sessions
- Understanding Python code for ML
- Understanding how to use a ML library