DIPARTIMENTO
DI INGEGNERIA
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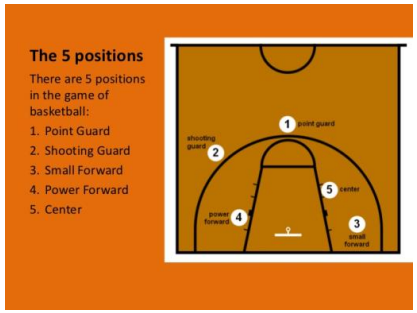
UNIVERSITÀ
DEGLI STUDI
DI PADOVA

LAB 1: Linear Classification and Regression

Machine Learning 2020
Slides P. Zanuttigh

LAB 1: Linear Regression and Classification

There are 2 tasks:



Classification of NBA players role

Regression on house prices data

LAB 1

Classification:

- Implement the Perceptron algorithm
- Use Logistic Regression from Python libraries

Regression:

- Use Least Square implementation in Python libraries

Complete the Notebook

- You have to complete the Jupyter notebook:
  - classification problem (NBA roles, perceptron and logistic regression)
  - regression task (house prices, Least Square)
- FIRST THING TO DO: you need to put your name and ID number in the notebook
  - You can use the ID also as seed for random number generators
- The notebook has missing code: need to fill in what is missing
- You must write the answer to all the questions in the notebook
- You should also place some text/comments (to explain choices or describe results)
- Feel free to add cells with text if you need to explain or describe some "non-standard" decision!
  - But do not change the input data files, they will not be submitted

The Task

- Complete the jupyter notebook
  - i.e., write the code and answer to the questions
- Check that they run properly from the beginning with the provided data (use the "*restart kernel&run all*" command)
- Save them as `surname_name_lab1.ipynb`
- Submit on elearning

Timeline

- Tue 27/10 : Homework released
- Tue 3/11: Lab 1 (room Ue)
- Fri 13/11: Delivery deadline
- The outcome is an on-off mark (i.e., +1 for the exam mark if the homework is reasonably done)