



# ML

Concepts & Introduction



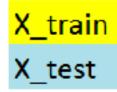
### Context: Functions

- ML → predictions
  - Scikit-learn Framework
  - Keras framework
  - Tensorflow framework
  - •
- ONLY scratching the surface



#### Built-in vs Custom Functions





feature 1	feature 2	response
1	2	2
3	4	12
5	6	30
7	8	56
9	10	90

y\_train y\_test



- Good practices
  - 70-30 rule
  - Shuffle your data
  - Make sure you have enough data



## ML in 4 steps & 4 imports

sklearn, numpy, matplotlib, pandas

Reshape if needed: X\_train,Y\_train

Run: Model.fit(X\_train,Y\_train)

Run: Model.predict(X\_test,Y\_test)

Run: accuracy\_score(y\_true, y\_pred)





### ML in 10 lines

### GO AND REWRITE WITH THE PACKAGES SEEN TODAY: matplotlib, pandas, scikit-learn

→ https://dbaumgartel.wordpress.com/2014/03/10/a-scikit-learn-example-in-10-lines/