06-fm-talk-slides-rise

March 23, 2018

In [51]:
```
import pandas as pd
import numpy as np

import matplotlib.pyplot as plt
import matplotlib.colors as colors
import seaborn as sns
sns.set()
plt.rc('axes',titlesize='xx-large')
plt.rc('axes',labelsize='x-large')
plt.rc('legend',fontsize='x-large')
plt.rc('ti')
%matplotlib inline
import warnings
warnings.filterwarnings("ignore")
np.random.seed(0)
np.set_printoptions(suppress=True, precision=2)
import pickle

with open('../data/acc_grid', 'rb') as f:
    # Pickle the 'data' dictionary using the highest protocol available.
    acc_grid =pickle.load(f)

with open('../data/loss_grid', 'rb') as f:
    loss_grid =pickle.load(f)
```

1 An introduction to neural networks with Keras

Dr. Florent Martin (Universität Regensburg)
March 2018

MACHINE LEARNING * choose a **MODEL** which depends on **PARAMETERS** * learn from **DATA** * choose model parameters that **FIT** the data

Neural Networks = family of models

Keras = Python Library for Neural networks

1. Logistic regression
2. Iris Dataset
3. Logistic regression with scikit-learn