

Machine Learning 2014: Project 1 - Regression Report

trubeli@student.ethz.ch
tdenoreaz@student.ethz.ch
liliu@student.ethz.ch

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Experimental Protocol

We started by using a multi-class svm on the raw data. We first wrote and experiment with the sci-kit learn classifier classes in order to obtain prediction. In a second step, we tried to enhance our score by normalizing the training dataset by:

1. Subtracting the mean of each feature of the dataset
2. Divide each feature vector by its standard deviation.

This normalization however seemed to fail in our case and lead to worst results. Finally we also tried to smooth the data points using a Gaussian filter. The idea behind this was (...)

1 Tools

We did most of the processing using Matlab, in the early stage of the project we used the sci-kit learn package in Python.

2 Algorithm

3 Parameters

We used 20 trees for our Random Forest algorithm.

4 Lessons Learned

The treebagger class of matlab seems to perform better compared to the random forest package in scikit learn. We have also noticed that the use of random forest seemed to always yield better parameters for our model.