

# Homework 1 – Analysis

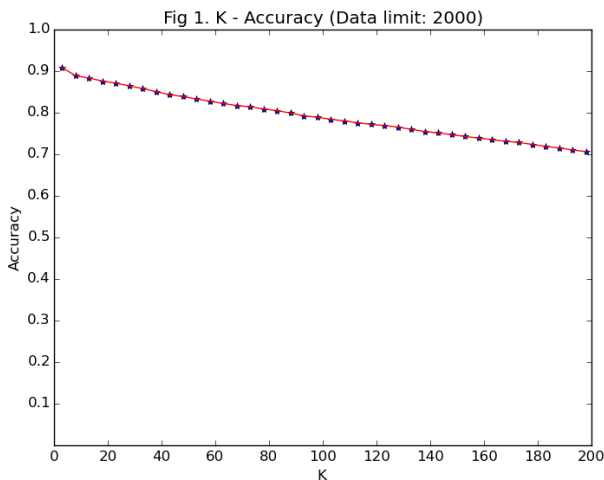
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## ■ Environment

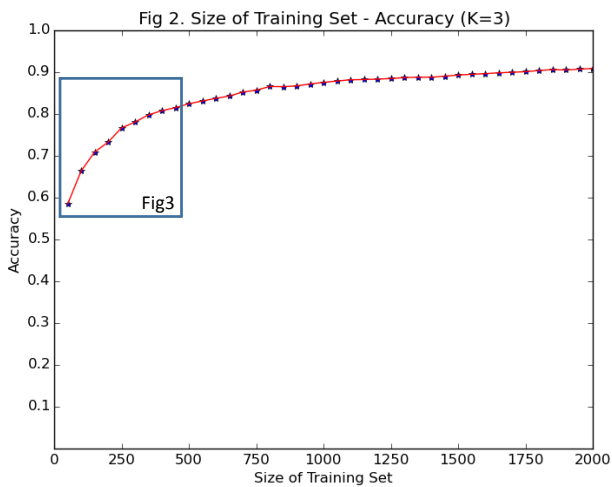
CPU: Intel Xeon E312xx 2.4GHz x 4; Memory: 8GB; OS: Ubuntu 14.04.3 LTS Linux 3.19.0-27 x86\_64

## ■ The relation between K and Accuracy



(Figure plotted by Python matplotlib)

## ■ The relation between Size of Training Set and Accuracy



## ■ Easily confused numbers

Classifier trained by whole training set (k=3)

Test Results:

Accuracy: 0.972800

Confused over 10 times:

2=>7 (18)      4=>9 (19)

5=>3 (19)      5=>6 (15)

8=>3 (11)      8=>5 (16)

9=>4 (14)