

# UNIK4690 Project

Akhsarbek Gozoev - akhsarbg  
Sadegh Hoseinpour - sadeghh  
Key Long Wong - keylw

May 3, 2018

## Dairy

### Day1

19.04.18

- Feedback on project proposal
- Overview of project
  - simplification
  - binary image  $\rightarrow$  numbers  $\rightarrow$  straight text  $\rightarrow$  Classify
- init; github - atom
- first test of charcter Segmentation

### Day 2

26.04.18

- Charcter Segmentation - Projection Histograms - TensorFlow
  - By projection the histogram of the binary image on the Y-axis, we can find where the sentences/lines of text appears. Following, a projection histogram on the X-axis can discover where the charecters appear.
- Classification - Perceptron neural network
  - MNIST dataset - Datasett consisting of several thousand handwritten labeled numbers
    - \* Numbers ranging from [0-9]
    - \* Images are 28x28pixels
  - Theoretic accuracy of the network with 2 hidden layers 97%
    - \* Measured accuracy 97%

- —
- —
- S —
- —
- —
- —