**Meeting 12 may 2016**

All attended.

Next meeting: May 19th, 12:30/15:30, HG0.217a

Flash talks: May 19th.

Notes:

- Use probability 0.0000000001 instead of 0 (logloss)

- Label images based on folder.

- cv2.imread, cv2.imresize around 5 times faster than scipy’s functions

- Get feature values from Google Drive.

Discussed:

- Select cutting per driver to include eyes and steeringwheel? We do not have ids for the testset. Solution: **Padding of the images.**

- Remove blank images, i.e. Only check for images in trainset, test set does not matter that much, as it would just be a guess. —> There are no empty images in trainset.

• img\_77655.jpg

• img\_79591.jpg

• img\_32463.jpg

- Laurens is working on tensor flow.

- We want to look at position of arms?

- We want to look at position of eyes?

- In LoadingData; for every set, fixed order of images. Check functions in Load.py. Also for featurevalues, when added to the folder (of gitdata).

- The train data is separated (with the same driver in each class) in 1/3 in validation set by 2/3 in trainset.

- Find correlation among features, and remove highly correlated.

- Use neural network for part of the image? Although data set might be too small to be efficient.

- Start : Perform a basic model (SVM & Decision trees).

-Motionvectors: Paper [ ] describes well, however, might only be for whole body. **Mail Maaike about if she thinks it is efficient/usefull.**

-We do not need an extensive neural network as the features are already based on network. To start: Use 2 fully connected layer, starting with a small value.

Today:

-Diede: check empty images, detect features that are equal among images and remove them.

-Roos: Motionvector,

-Danielle: Perform SVM on featurevalues. Research gaze.

-Laurens: Tensorflow.

-Nathaneal: Perform Decision trees on featurevalues. Make submission file

Login Kaggle:

un: TeamBiggerThanBrains

pw: Farwell2012

Submission:

First - 567, 2.26837

Second - 567 - 2.63912,

Third - 567 - 7.93345

By end of today:

-Flashtalk preparations

-Roos & Nathaneal

For next meeting:

- Roos : Recognising actions from still images. Change parameters, improve everything. Feature extraction from border images.

- Diede : Reading feature selection, implement feature selection.

- Laurens : Neural network, higher than 10.7%, work on improving it.

- Nathaneal : Create random forest. Submit. Check forum for other features. Prepare slides.

- Danielle : Train on trainset. OpenCV. Tweak SVM. Prepare slides.

**Meeting 29 april 2016**

Absent: Nathaneal

Future meetings: Thursdays, 12:30/13:30-17:30

Next meeting: May 12th, 12:30/13:30, location to be specified.

Flash talks: May 19th.

Diede absent: 9 juni (afternoon).

Roos absent: 9 juni.

Definitions:

- Traindata = Full data set of train images

- Trainset = Trainpart of the train data (2/3 of the traindata).

- Validationset = Validation part of the train data (1/3 of the traindata).

Challenge:

- Images all same format

- One label per image

- All possible actions/labels per passenger

- 22425 images in train data

- Use 1/3 for validation.

- Submission: Probabilities per class

- Can be 0, Kaggle accounts for it.

Discussed:

- Caffe features with poly kernel SVM/Decision Tree etc.

- Recognise motion vectors.

- Split train data into trainset and validationset

- Deep Neural Network for classification (Lasagne, Theano, TensorFlow ? )

- Make functions for importing data

- Read forum

- Get final layer of Caffe network (detect phones).

- Which number is phones

- Which number is drinks

- Use Cartesius of ml0902

Planning before first meeting (May 12th):

- Cut all images to 224x224(?).

- Import data

- Split train and validationset

- All images per person in the same set.

- Adjust Caffe script for last layer

- Research Forum

- Research motion vectors

- Research Tensor Flow

Done before flash talks, May 19th:

- Run Caffe script

- Make Flashtalks

- One submission

Meeting Maaike:

- May 19th, before flashtalks?

Tasks before next meeting:

Diede:

- Clean Git and divide into project 1 and 2.

- Import data

- Split train/validation

Roos:

- Caffe features

- Size photos network

Laurens:

- Research Tensor Flow

Danielle:

- Research

- Nathaneal added to Git

- Mail Maaike

- Reserve library room

Nathaneal:

- Read previous project

- Images cutten