# Preprocessing Steps:

## preprocessing.py

### makeDatasetFromVideos()

* load videos
* divide videos into images
* rotate and resize images
* add images into arrays (left, right, false)
* transform into numpy arrays
* normalize arrays
* concatenate arrays
* make labels
* transform array into one hot encoding

### cropDataset()

* + load pretrained face detection model (caffeModel ssd)
  + load haarcascade classical eye detector
  + run face detection model on images (output from makeDataset() ) to get bounding boxes
  + if eyes detected in bounding box this box will be added to an array
  + sort array by confidence and select the box with the highest confidence
  + add image to new numpy array

y: 35 – 60

x:

# Challenges:

1. Not enough ram

Solution: resize images before appending into array