

CSE541 Computer Vision

Weekly Report

Section-1

Group 1 - Fantastic Four

Submitted to faculty: Prof. Mehul Raval

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Student Details

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**Tasks Performed in the week:**

* Trained the Dataset of celebrity images using both MobileNet and SqueezeNet and compared the Accuracy and Validation Loss for the same.
* We also Tested a few images on both the models to check which model will be performing better while implementing Face recognition system.

**The outcome of the tasks performed:**

* While training the model we found out that SqueezeNet was showing more Accuracy and less Validation loss.
* Even while testing SqueezeNet showed the most accuracy.
* We also Know that SqueezeNets have extremely low latency, in addition to the fact they don't have dense layers. MobileNets utilize depth-wise separable convolutions, very similar to inception towers in inception. These also reduce the number of parameters and hence latency.
* Hence, it makes sense to use the SqueezeNet model instead of MobileNet, as the training was done from scratch without any pre-trained weights.

**Tasks to be performed in the upcoming week:**

* In the next week, we aim to introduce SqueezeNet in the final implementation of real time face recognition from webcam or a video frame by frame.
* With a given time constraint, if we are left out with some time we might also introduce an Attendance system.