

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:**

* Sir suggested that we study why the MobileNet Model is the most suitable for this case. So, we already know that MobileNet has fewer parameters and is very fast and efficient than FaceNet. But at the same time, it became important for us to have a look at other new, popular and interesting models also.
* We deeply studied other models like ShuffleNet, GoogleNet and SqueezeNet to understand the best model for our project.
* We also discovered the challenges that we might face during face recognition that are Illumination, Occlusion and Variations in face poses and will further apply such images for training and validation.
* Lastly, We also reworked on the PPT and Report that we already submitted and modified it according to the comments/Reviews that were given to us.

**The outcome of the tasks performed:**

* We got to know about different models used in face recognition like ShuffleNet, GoogleNet and Squeezenet.
* We got to know about their different number of parameters, architecture and features which make them a good face recognition and classification model in different scenarios.
* The exploration of such different models gave us a good insight on how, why and which model we should use for face recognition.
* We also got to know some interesting, yet complex, ways to solve different face recognition challenges and constraints.

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

* In the next week, we aim to train the models on our dataset and have a look at what accuracies they provide and based on it, we aim to select one of the models for our project.
* We aim to fix one of the challenges to be solved as a part of our project, and devise a technique suitable to solve it.