

CSE541 Computer Vision

Weekly Report-2

Section-1

Submitted to faculty: Prof. Mehul Raval

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Student Details

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**Tasks Performed in the week:**

* We understood and analyzed the pre-trained model of “Keras-OpenFace Model” as we are going to create a model to train the Dataset. It is a project converting OpenFace from its original Torch implementation to a Keras version.
* We also learned about the world of convolutional neural networks and Deep Learning concepts together, so that each of us is on the same page. We continued reading our research paper to analyze and understand the complex topics and ideas within.
* We downloaded and collected the dataset of the Celebrities from the internet, and used our last week’s progress code to crop and align the images according to the requirement.

**The outcome of the tasks performed:**

* This gave us some insights into the “Keras-OpenFace” model and how it will train the datasets. It will use Convolution, Normalization, and some functions like padding and pooling to get the normalized data of the images, And later use that data to get the embedding vectors from the Inception network.
* Got a fair understanding of how to use and implement Keras-Openface model programmatically for our project. We would like to explore more of it in the upcoming weeks.

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

* We will continue with the exploration of the Keras-OpenFace pre-trained model, CNN, and FaceNet.
* Then we will implement the Keras-OpenFace model in our project and train the datasets in the model to get the embedding vectors of all images.
* We have to implement the L2 Euclidean distance function in order to effectively recognize images in real-time.