PROJECT REVIEW Q/A’s

1. What is forward propagation and backward propagation?

A. They come under Artificial Neural Networks. Forward propagation does not have feedback feature where as backward propagation has feedback feature.

2. What is softmax classifier?

A. Softmax classifier is a classification model used in recognizing and classifying the facial emotions present in images.

3. What types of data sets you are going to use?

A. Two types of data sets are to be used in this project. One is Fer-2013 and the other is LFW dataset.

4. What is the Objective of this project ?

A. The main objective of the project is to build a model based on convolutional neural networks that recognizes and classifies facial emotions using image edge detection.

5. Do you use forward or backward propagation in your project? And why?

A. Backward propagation is used in this project because it can give feedbacks while training the data. Feedback mechanism helps in enhancing the performance of the classifier.

6. How normalization and pre- processing is done?

A. Firstly, we locate the face in the image and cut out the face image. Then, we normalize the face image to a specific size. Next, we equalize the histogram of the image to reduce the influence of illumination and other factors. Finally, we extract the edge of each layer of the image in the convolution process.

7. What are the features of the dataset?

A. There are two datasets that are scientifically mixed to increase the robustness of the classifier.

* LFW dataset contains more than 13000 images collected from web.
* Fer-2013 dataset contains 48x48 gray scale images of faces.

The features to be considered from these datasets are,

* Gray level of images.
* Contrast
* Size of images.
* Haar-like features (linear, edge, center, diagonal)

