**Diabetic Retinopathy detection using mobile friendly networks**

**Idea:** The idea is to implement a image classification on Diabetic retinopathy dataset

***Existing approaches performed:*** resnet, Inception v3, Vgg16 – kaggle DR dataset – Paper rejected

**Implementation Ideas:**

1. Optimize hyper-parameters for the implemented networks(resnet, Inception v3, vgg 16) for better accuracy

2. **Implement Hyperparameter tuning on Mobile net v2 , Nasnet mobile**, or other latest possible networks that are mobile friendly ( occupy less space for model storing as well as compatible with on board mobile hardware) – *This is time efficient in the given time frame*

3. **Time taking approach:** Implement GAN’s for enhancing the existing data to normalize the biased classes find compatible networks for classification or GAN implementation

Available data: Original dataset (DR dataset – HD images of 82gb)

Kaggle dataset (10 gb) – small subset and less quality of images

Possible combination with messidor and Idrid datasets with any of the above mentioned two datasets.