Improved Features for Deep Learning based Fundus Image analysis for Diabetic Retinopathy grading

*\*Tentative name*

# **Dataset** : EYEPACS (Kaggle) link – [*click here*](https://www.kaggle.com/c/diabetic-retinopathy-detection)

# **Papers that will be referred** *(\*tentative and more will be added)*:

1. [Deep learning algorithm predicts diabetic retinopathy progression in individual patients](https://www.nature.com/articles/s41746-019-0172-3)
2. [Deep Learning Fundus Image Analysis for Diabetic Retinopathy and Macular Edema Grading](https://www.nature.com/articles/s41598-019-47181-w)
3. [Convolutional Neural Networks for Diabetic Retinopathy](https://www.sciencedirect.com/science/article/pii/S1877050916311929)
4. [Diabetic Retinopathy detection through integration of Deep Learning classification framework](https://www.biorxiv.org/content/10.1101/225508v2.full.pdf)

**Content :**

1. **Short review of existing literatures**
2. **Setting up architecture in cloud**
3. **Assistance in setting up architecture locally (Limited to hardware capability)**
4. **Modelling of Deep CNN architecture**
5. **Inferencing of results**
6. **Experimentation with other models and result comparison**
7. **Future work possible and references**

**Poster Example :**

