**Project OCT**

**1.Introduction**

The aim of this project is to build an explainable AI model that can detect multiple eye diseases from the OCT images.

**2. Datasets**

Currently, there are two datasets available in our data store. The details about the datasets are given below.

1. **Mendeley Dataset**

|  |  |
| --- | --- |
| **Pathology** | **Image Count** |
| Normal | 51,390 |
| Drusen | 8,866 |
| DME | 11,598 |
| CNV | 37,455 |
|  | **1,09,312** |

1. **Artelus Dataset**

|  |  |
| --- | --- |
| **Pathology** | **Image Count** |
| Normal | 1798 |
| DR | 107 |
| AMRD | 1530 |
| CSR | 102 |
| MH | 102 |
|  | **3640** |

**3. Training Procedure**

Firstly, the base model will be built using x-ray images from the different sources. Once the base model is ready, we will use the transfer learning using the OCT dataset on top of the base model.

**4. Things to Work on**

a) Gather more datasets.

b) Gather more information on pathologies detected using OCT images.

c) Can we identify the camera being used from images.