Project Description

Diabetic Retinopathy Detection Using ML (CNN) and image processing

- Diabetic retinopathy is one of the most common complications of diabetes. Unfortunately, in most cases the patient does not experience any symptoms until it is too late for effective treatment. By analysing the potential response of the retina, optical nerve, and visual centre, an early diagnosis of diabetes and prognosis will be opened during the treatment process.
- We presents a neural-network approach to classify studies of diabetic retinopathy in terms of changes in visual acuity. We have developed a computer based model using convolutional neural network which can classify whether a person a suffering from retinopathy or not. This model used layering mechanism to sub dividing the images into different parts. We have used different python module for building the neural network for example: keras, tensorflow , kreas application, numpy, pandas, tqdm, sklearn, model_selection, train test split.

- It is Web based Flask software which can detect blindness or blur vision due to complication of diabetic disease. This software use different python module for various pre-processing technique of image and detect the Retinopathy using convolutional neural networks.

Parkinson Diseases Detection Using ML

- **Parkinson's Disease Prediction Software** is a desktop based GUI application that is predicting the chance of a patient having Parkinson's disease, which is a type of neurological disorder that affects small regions in the brain that control movement, posture and balance.
- The software is based on Predictive Analytics and Machine learning which creates a prediction model that is capable to predict the chance of a patient having Parkinson's .
- This software uses the **UCI machine Learning repository's** Parkinson dataset that has 23 attributes and 197 instances.

- Our predictive model is using ADABOOST classifier which is a short for Adaptive Boosting. It is a Boosting technique that is used as an Ensemble Method in Machine Learning which helps to predict status of patient's disease.

During modeling we take training dataset for training the model with different parameters so as to make an optimal prediction model with good accuracy.

Employee Management System

This desktop application is written in Java and has a Swing and AWT-based GUI. We can manage all of an employee's necessary information in any firm with this software. This application allows employees and administrators to communicate with each other.

For admin feature we have added Sign In Authentication Tab for Employee Data Tab for adding a new employee, Tab for Updating details, Tab for Removing an employee Feedback/performance Analysis, Tab Project Team's allocation, Tab Review Employee Feedback, Tab Payroll Tab for Each employee and Leave Approval Tab

For Employee Feature we have added Sign In Authentication ,Tab for Payroll Details, Leave application Tab, Personal Profile Tab, Current project allocation with team members, Feedback or satisfaction level with the organization and Rating/Performance Analysis