Detecting Parkinson's Disease Using Machine Learning

Problem Statement:

Further than 10 million people are living with Parkinson's disease worldwide, according to the Parkinson's Foundation. While Parkinson's cannot be cured, early discovery along with proper drug can significantly ameliorate symptoms and quality of life.

The experimenters set up that the delineation speed was slower and the pen pressure is lower among Parkinson's cases. One of the suggestions of Parkinson's is tremors and severity in the muscles, making it delicate to draw smooth gyrations and swells.

It's possible to descry Parkinson's complaint using the delineations alone rather of measuring the speed an d pressure of the pen on paper. Our thing is to quantify the visual appearance (using overeater system) of these delineations and also train a machine learning model to classify them. In this design, We're using, Histogram of acquainted slants(overeater) image descriptor along with a Random Forest classifier to automatically descry Parkinson's complaint in hand- drawn images of gyrations and swells.

To accomplish this we must follow the following steps:

Firstly, we'll need to collect data; this can be done from Kaggle for instance. Then we'll need to preprocess the images using relevant libraries. Consequently, we must build the model, train as well as test the model. Subsequently we must create a GUI so that the user can have an easy interaction with the system. This can be done with the help of an HTML file and a python flask.