Detecting Parkinson's Disease using Machine Learning

Problem Statement:

1.Who does the problem affect?

Men are slightly more likely to get affected by Parkinson's disease compared to women.

2. What are the boundaries of the problem?

People usually develop the disease around age 60 or older.

3.What is the impact of the issue?

Parkinson's disease is caused by a loss of nerve cells in part of the brain called the substantia nigra. This leads to a reduction in a chemical called dopamine in the Brain**.**

4.What impact is the issue causing?

Motor symptoms: slow movement, tremor, rigidity, walking and imbalance.Non-motor complications: cognitive impairment, mental health disorders, sleep disorders and pain and other sensory disturbances.

5.When does it need to be fixed?

It needs to be fixed at the earliest when the suspected symptoms like soft or low voice, tremors, lack of facial expression and so on occur.

6.What would happen if we didn't solve the problem?

Does not directly cause people to die, but the condition can place great strain on the body and can make some people more vulnerable to serious and life-threatening Infections.

7.Where is the issue is occurring?

The most prominent signs and symptoms occur when nerve cells in the basal ganglia that control movement become impaired or die.

8.Why is it important that we fix the problem?

By early detection of disease makes the people to take proper diagnosis on time to improve the quality of life of patients.

9.What methodology used to solve the issue?

Supervised and Un-supervised machine learning, Data mining , Computer vision with OpenCV, Python web application interface – Flask , IBM Cloud.

10.Why is it important that we fix the problem?

It is very crucial to develop a application that detects the disease at good prediction rate so that it helps to get a clear line of disease symptoms during the times.