**Parkinson's Disease Detection**

**Background:** Parkinson’s disease is a degenerative disorder affecting millions worldwide. Its early detection is vital for effective treatment and symptom management. Traditional diagnostic methods often rely on subjective clinical evaluations, making machine learning a valuable tool for identifying subtle markers of the disease.

**Abstract:** This project utilizes machine learning to predict the presence of Parkinson’s disease from clinical datasets. Key features such as vocal attributes, amplitude variation, and motor symptoms are analyzed to train classifiers like Support Vector Machines or Neural Networks. The model achieves high precision, aiding early diagnosis and enabling timely intervention. By providing actionable insights, the system serves as a supplementary tool for healthcare professionals, streamlining diagnostic workflows and improving patient outcomes.

**Key Features:**

* Analysis of clinical markers and symptoms for disease prediction.
* High precision and recall using advanced machine learning classifiers.
* Scalable for integration into diagnostic systems.
* Early detection to improve treatment outcomes.