DETECTING PARKINSON'S DISEASE USING MACHINE LEARNING

Parkinson diseases are the most critical causes of death and disability worldwide.Parkinson usually affects a large part of worldwide patients over the age of 50, which has affected up to now. Still now there is no known cause of Parkinson disease, however, it is very likely possible to assuage symptoms knowingly in the early stage of the subjective patients . Approximate 90% of the patients affected with voiced damage a study appealed this . The Parkinson treatment is likely very costly. This causes most of the patients cannot afford the cost of the Parkinson disease. Nowadays, Parkinson disease prediction is most critical matter for clinical practitioners to take accurate decision of such disease. It's a great exercise apresent time, machine learning based extensive platform can detect Parkinson disease.this section of the describes the theoretical background of this project, starting with an explanation of parkinson's disease, followed by overviews of machine learning, deep learning, related work and finally pd diagnosis problems. the detection of pd is extremely important at the first stage.this entails the literature survey that was conducted for the purpose of better understanding the problem at hand and to explore possible solutions.

LITERATURE SURVEY:

Author Name : DAVID GIL A, MAGNUS JOHNSON B

Title of the Paper : Diagnosing Parkinson by using Artificial Neural Networks and Support Vector Machines

Description : He found that with a smaller number of neurons at hidden layer both training set and test sets performed poorly. With higher number of neurons, the training set performed well with high risk of over fitting. The ideal solution for this layer was found to be 13 neurons.

Author Name : Mohammad S Islam

Title of the Paper : The Mechanistic Role of Thymoquinone in Parkinson's Disease: Focus on Neuroprotection in Pre-Clinical Studies

Description : He compared various ML techniques based on their performance accuracies in determining whether person is having PD or not and mentioned that new classifier may be built to get better accuracies.

Author Name : Kazi Amit Hasan

Title of the Paper : Classification of Parkinson's Disease by Analyzing Multiple Vocal Features Sets

Description : He used different classification methods RF, KNN, Decision Tree, Logistic Regression (LR), SVM, and Naïve Bayes for detection of PD. The best result achieved by Decision Tree and Random Forest (RF) classification methods. The data mining techniques may be a more popular in many field of medical, business, railway, education etc. They are most commonly used for medical diagnosis and disease prediction at the early stage. The data mining is employed for healthcare sector in industrial societies.

Author Name : Shail Raval

Title of the Paper : A Comparative Study of Early Detection of Parkinson's Disease using Machine Learning Techniques

Description : For the detection of PD they include all the aspects such as biological data, chemical data and genetic data. In this paper they mainly focused on the symptoms like rigidity, Tremor at rest, changing voice etc. The secure data transmission is proposed through authentication check, duplication check and faulty node detection. The proposed method is applicable to long ranges of transmission. It is also supporting a retransmission concept.

Author Name : Rajalakshmi Shenbaga Moorthy

Title of the Paper : Freezing of Gait Prediction in Parkinsons Patients Using Neural Network

Description : Novel analytic system for Parkinson’s disease Prediction mechanism using Improved Radial Basis Function Neural Network (IRBFNN). RNNs is during a one among the deep learning models that are used for modeling the arbitrary length sequences by applying a transition function to all or any it’s hidden states during a recursive manner.