

**ANNA UNIVERSITY: CHENNAI 600 025**



**BONAFIDE CERTIFICATE**

Certified that this project report **“PREDICTING STAGES OF PARKINSON’S DISEASE USING MACHINE LEARNING”** is the bonafide work of **SRUTHI SANKAR(312315205159)** and **SUPRABHA S(312315205166)** who carried out the project work under my supervision, for the partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Information Technology.

**SIGNATURE**

Dr. V.Muthulakshmi M.E., Ph.D.,  
Professor

**HEAD OF THE DEPARTMENT-  
LAB AFFAIRS**

Department of  
Information Technology  
St.Joseph’s College of Engineering  
Old Mamallapuram Road  
Chennai-600119

**SIGNATURE**

Dr. P .KALAIVANI,Ph.D.,  
Assistant Professor

**SUPERVISOR**

Department of  
Information Technology  
St.Joseph’s College of Engineering  
Old Mamallapuram Road  
Chennai-600119

Submitted for the Viva -Voce held on \_\_\_\_\_

**(INTERNAL EXAMINER)**

**(EXTERNAL EXAMINER)**

## **CERTIFICATE OF EVALUATION**

**College Name** : St.Joseph's College of Engineering

**Branch & Semester** : Information Technology (VIII)

<b>S.NO</b>	<b>NAME OF THE STUDENTS</b>	<b>TITLE OF THE PROJECT</b>	<b>NAME OF THE SUPERVISOR WITH DESIGNATION</b>
1.	SRUTHI SANKAR (312315205159)	PREDICTING STAGES OF PARKINSON'S DISEASE USING MACHINE LEARNING (PSPD)	Dr.P.KALAIVANI PHD
2.	SUPRABHA S (312314205166)		

The report of the project work submitted by the above students in partial fulfilment for the award of Bachelor of Technology degree in Information Technology of Anna University were evaluated and confirmed to be reports of the work done by the above students.

**(INTERNAL EXAMINER)**

**(EXTERNAL EXAMINER)**

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## **ABSTRACT**

Parkinson`s disease (PD) is a progressive neurodegenerative movement disease affecting over 6 million people worldwide. However there is currently no definitive test for PD by non-specialist clinicians, especially in early disease stages where the symptoms may be subtle and poorly characterised. This results in high misdiagnosis rate (up to 25%by non-specialists) and people can have the disease for many years before diagnosis. There is a need for a more accurate, objective means of early detection, ideally one which can be used by individuals in their home settings.

In health care industries, the demand for maintaining large amount of patient`s data is steadily growing due to rising population which has resulted in the increase of details about clinical and laboratory tests, imaging , prescription, medication. The proposed predictive analytics framework is a combination of k-means clustering and decision tree which is used to gain insights from patients. By using machine learning techniques, the problem can be solved with minimal error rate. Parkinson`s disease voice dataset from UCI machine learning repository is used as input. Thus our experimental results will show early detection of disease which will facilitate clinical monitoring of elderly people and increase the chances of their life span and improved life style to lead peaceful life.

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## **LIST OF ABBREVIATIONS**

<b>IOT</b>	Internet Of Things
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