Kingdom of Saudi Arabia
Ministry of Higher Education
King Abdulaziz University
Faculty of Computing and
Information Technology
In Rabigh

بسم الله الرحمن الرحيم

المملكة العربية السعودية
وزارة التعليم العالي
جامعة الملك عبد العزيز
كلية الحاسبات وتقنية المعلومات برابغ

GRADUATION PROJECT PROPOSAL

Academic Year/Semester: 1433-1434/First

A.GENERAL INFORMATION

A1. Supervisor(s): Dr. Amir Ahmad
A2. Project Title: Analysis of sensor data for detection of Parkinson disease
A3. Number of Students: 1-2

B.PROJECT ABSTRACT

With the advancement in the internet, it is easy to collect data on network. The cost of wireless sensor is coming down. Hence, wireless sensors are placed everywhere and data is collected on the network. Parkinson disease is a degenerative disorder of the central nervous system. The speech disorder is one of the symptoms of the disease. The patient use speech sensor to record his speech, the data is sent to a station where data is analyzed to predict the severity of the disease. Generally, data mining (sometimes called data or knowledge discovery) is the process of analyzing data from different perspectives and summarizing it into useful information. Data mining software is one of a number of analytical tools for analyzing data. In this project, we will analyze sensor datasets by using data mining techniques to predict the severity of Parkinson disease.

C. REQUIREMENTS(both hardware and software)

- **Hardware :** Laptop or Desktop.
- **Software :** Open source data mining software, any programming language preferably Java.

D.PROJECT PHASES

1- Learning data mining techniques
2- Learning about sensor datasets
3- Analysis of sensor datasets for predicting the severity of Parkinson disease.
4- Interpretation of results
5- Report writing

E. SCHEDULING OF PHASES

Semester 1: 1-3
Semester 2: 3-5