**Diagnosis of Various Thyroid Ailments using Data Mining Classification Techniques**

**ABSTRACT**

Classification is one of the most considerable supervised learning data mining technique used to classify predefined data sets the classification is mainly used in healthcare sectors for making decisions, diagnosis system and giving better treatment to the patients. In this work, the data set used is taken from one of recognized lab of Kashmir. The entire research work is to be carried out with ANACONDA3-5.2.0 an open source platform under Windows 10 environment. An experimental study is to be carried out using classification techniques such as k nearest neighbors, Support vector machine, Decision tree and Naïve bayes. The Decision Tree obtained highest accuracy of 98.89% over other classification techniques.

**Existing System**

Now-a-days, Disease diagnosis has become very crucial because of occurrence of so many diseases every year. People from all over the world have been suffering from various health issues like diabetes, heart disease, typhoid, tuberculosis, kidney disease etc .Beside these health issues , thyroid disease have also been detected worldwide and thus become a serious endocrine health problem and an issue of concern. It is expected that in India about 42 million people suffer from thyroid disorders. As per resent studies, women are 5 to 8 times more prone to thyroid disorders than men worldwide.

**Disadvantages**

1. Disease diagnosis has become very crucial because of occurrence of so many diseases every year
2. Become a serious endocrine health problem and an issue of concern.

**Proposed System**

In this work, the data set used is taken from one of recognized lab of Kashmir. The entire research work is to be carried out with ANACONDA3-5.2.0 an open source platform under Windows 10 environment. An experimental study is to be carried out using classification techniques such as k nearest neighbors, Support vector machine, Decision tree and Naïve bayes. The Decision Tree obtained highest accuracy of 98.89% over other classification techniques.

**Advantages**

1. K nearest neighbor, Support vector machine, Decision tree and Naive Bayes classifiers have been used.
2. Better results.

**Hardware Requirements:**

# Processor - Pentium –IV

* Speed - 1.1 GHz
* Ram - 256 MB
* Hard Disk - 20 GB
* Key Board - Standard Windows Keyboard
* Mouse - Two or Three Button Mouse
* Monitor - SVGA

**Software Requirements:**

* Operating System - Windows XP
* Coding Language - java