

NARASARAOPETA ENGINEERING COLLEGE

(AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2023-2024

| BATCH NUMBER | BG9 |
|--------------------------|---|
| TEAM MEMBERS | CH.Poojitha(20471A0573) B.Vandana (20471A0571) M.Sandhya(20471A0597) |
| GUIDE | Dr.M.Sireesha. |
| TITLE | Prediction of ThyroidDisease |
| DOMAIN/TECHNOLOGY | MACHINE LEARNING |
| BASEPAPER LINK | https://ieeexplore.ieee.org/abstract/document/9811472 |
| DATASET LINK | https://www.kaggle.com/code/yasserhessein/thyroid-disease-detection-using-deep-learning |
| SOFTWARE REQUIREMENTS | Operating System:Windows 10 Home,64-bit Operating system Coding Language:Python Python distribution:Anoconda,Google Colab |
| HARDWARE REQUIREMENTS | CPU:Intel Corei7,AMD Ryzen RAM:8GB Storage:SSDs(500GB to 1TB SSD) GraphicsProcessingUnit(GPU) |

ABSTRACT

Detecting and predicting thyroid disease is increasingly vital across men, women and even in children. Classification and data mining methods are an effective way to classify data in medical In this project we employ machine learning algorithms, specifically K-Nearest Neighbors (K-NN), Decision Tree (DT), and Multilayer Perceptron (MLP) models. where these methods are widely used in diagnosis and analysis to make decisions.

By utilizing a robust dataset, we aim to train 70% of dataset and test 30% of the dataset. Accessing the accuracy and area under the curve will provide valuable insights, aiding doctors in diagnosing thyroid diseases early and potentially preventing the development of thyroid cancer.

SignatureofTeamMembers

SignatureoftheGuide

SignatureoftheProjectCoordinator