NARASARAOPETA ENGINEERING COLLEGE

(AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2023-2024

BATCH NUMBER	BG1
TEAM MEMBERS	Shaik Samreen (20471A05B6) Shaik Roshini (20471A05B4) Netuluri Akshara Pragna (20471A05A3)
GUIDE	G.Saranya
TITLE	Breast Cancer Prediction
DOMAIN/TECHNOLOGY	MACHINE LEARNING
BASE PAPER LINK	https://doi.org/10.1016/j.procs.2021.07.062
DATASET LINK	https://www.kaggle.com/uciml/breast-cancer-wisconsin-data
SOFTWARE REQUIREMENTS	Browser: Any latest browser like Chrome Operating System: Windows 7 Server or later Python (COLAB)
HARDWARE REQUIREMENTS	Processor: Intel® Dual Core 2.0GHz minimum Hard Disk: 1TB minimum RAM: 8GB or more

ABSTRACT	Each year number of deaths is increasing extremely because of breast cancer. It is the most frequent type of all cancers and the major cause of death in women worldwide. Any development for prediction and diagnosis of cancer disease is capital important for a healthy life. Consequently, high accuracy in cancer prediction is important to update the treatment aspect and the survivability standard of patients. Machine learning techniques can bring a large contribute on the process of prediction and early diagnosis of breast cancer, became a research hotspot and has been proved as a strong technique. In this study, we applied five machine learning algorithms: Support Vector Machine (SVM), Random Forest, Logistic Regression, Decision tree (C4.5) and K-Nearest Neighbours (KNN) on the Breast Cancer Wisconsin Diagnostic dataset, after obtaining the results, a performance evaluation and comparison is carried out between these different classifiers. The main objective of this research paper is to predict and diagnosis breast cancer, using machine-learning algorithms, and find out the most effective whit respect to confusion matrix, accuracy and precision.