NARASARAOPETA ENGINEERING COLLEGE

(AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2023-2024

BATCH NUMBER	CB8
TEAM MEMBERS	Ch. Siddu(20471A05E3) R. Naga Venkata Purna Pavan Kumar (20471A05H6)
GUIDE	G. Saranya
TITLE	Wine Quality Prediction
DOMAIN/TECHNOLOGY	MACHINE LEARNING
BASE PAPER LINK	https://ieeexplore.ieee.org/document/9908870
DATASET LINK	https://www.kaggle.com/datasets/uciml/red-wine-quality-cortez-et-al-2009
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	Wine is a popular drink across the globe and the gender. Older the Wine, better is the taste but, expensive. The Wine quality is measured based on the important parameters, such as free Sulphur dioxide, Volatile acidity, Citric Acid and Residual sugar. The traditional way of Wine quality assessment was time consuming. This paper gives an automatic prediction of Wine quality, as good or bad, using machine learning approaches which are Neural Networks, Logistic Regression and Support Vector Machine are implemented on standard datasets of Portuguese "Vinho Verde" Wine. The results are compared with standard values. The support vector Machine has achieved superior than other techniques with error of 0.003. The quality rate for SVM is 7.99. The work is useful in Wine industry for quality testing and assurance for customers.