

## NARASARAOPETA ENGINEERING COLLEGE

(AUTONOMOUS)

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING 2023-2024

BATCH NUMBER	BG7
TEAM MEMBERS	Ch.Poojitha (20471A0577) G. Sindhu (20471A0583) K.Hima (20471A0587)
GUIDE	M.Sireesha
TITLE	Prediction of Bank Loan Eligibility
DOMAIN/TECHNOLOGY	MACHINE LEARNING
BASE PAPER LINK	https://www.researchgate.net/publication/36158 4877 Machine Learning Models for Predicti ng_Bank_Loan_Eligibility
DATASET LINK	https://www.kaggle.com/datasets/altruistdelhite 04/loan-prediction-problem-dataset
SOFTWARE REQUIREMENTS	Browser: Any latest browser likeChrome Operating System: Windows 10 Server. Language: Python
HARDWARE REQUIREMENTS	Processor: Intel® Dual Core 2.0GHz minimum Hard Disk: 1TB minimum RAM: 8GB or more

## **ABSTRACT**

Processes across various industries, including real estate, security, biology, and the financial sector, are being revolutionized by machine learning algorithms. One of the most laborious responsibilities in the banking sector is the process. The speed, effectiveness, and accuracy of loan approval processes can all be enhanced by contemporary technology, such as machine learning models. In order to forecast loan eligibility, this study provides six machine learning techniques (Random Forest, Gradient Boost, Decision Tree, Support Vector Machine, K-Nearest Neighbor, and Logistic Regression). The historical dataset "Loan Eligibility Dataset," which is accessible on Kaggle and licensed under Database Contents License (DBCL) v1.0, was used to train the models. On Kaggle's Jupiter Notebook cloud platform, Python programming libraries were used to process and analyses the dataset. The Random Forest algorithm provided the highest performance accuracy in our study.