NARASARAOPETA ENGINEERING COLLEGE

(AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2023-2024

BATCH NUMBER	BG-8
TEAM MEMBERS	P.Lakshmiswathi(20471A05A7) S.Sivathmika (20471A05A9) K. Sravanthi (20471A0589)
GUIDE	K.V. Narasimha Reddy, M.Tech. Asst.Professor.
TITLE	Crime Prediction and Forecasting
DOMAIN/TECHNOLOGY	MACHINE LEARNING
BASE PAPER LINK	https://www.researchgate.net/publication/355872171_Crime_Prediction_and_Forecasting_using_Machine_Learning_Algorithms
DATASET LINK	https://www.kaggle.com/datasets/vic666/chicago-crimes-2012-to-2017
SOFTWARE REQUIREMENTS	1.OS: Windows or Linux 2. Python IDE: python 2.7.x and above 3. jupyter notebook 4. Setup tools and pip to be installed for 3.6 and above 5. Language: Python Scripting
HARDWARE REQUIREMENTS	1.RAM: 4GB and Higher 2 Processor: Intel i3 and above 3 Hard Disk: 500GB: Minimum

ABSTRACT

Crime prediction and forecasting play a pivotal role in the modern law enforcement landscape, aiming to preemptively identify and mitigate potential criminal activities. Police departments and other law enforcement agencies grapple with the task of efficiently allocating their resources to areas and times with a higher likelihood of criminal incidents. In this project, we propose a machine learning-based approach to enhance the accuracy and efficiency of crime prediction and forecasting. Leveraging advanced machine learning algorithms, we predict the likelihood of criminal activities occurring in specific locations and timeframes based on various key features and historical crime data. Furthermore, we provide a comparative analysis of different classification and regression algorithms to underscore the effectiveness of machine learning in augmenting crime prediction accuracy. Our findings demonstrate that machine learning algorithms can significantly improve the precision of crime forecasting, aiding law enforcement agencies in proactively addressing and preventing criminal activities.