#### **CRIME RATE PREDICTION**

A Industrial/Practical Training project report

## Submitted to the Faculty of Engineering of JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA, KAKINADA

In partial fulfillment of the requirements for the award of the Degree of

# BACHELOR OF TECHNOLOGY In COMPUTER SCIENCE AND ENGINEERING

By

K.OOHA N V SRI LAKSHMI (17485A0510)

G.VYSHNAVI DURGA (16481A0555)

D.S L PRASANNA (16481A0545) **B.BALA SANDEEP** (17485A0504)



#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GUDLAVALLERUENGINEERINGCOLLEGE
(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)
SESHADRIRAOKNOWLEDGEVILLAGE
GUDLAVALLERU – 521356
ANDHRA PRADESH
2019-2020

#### **GUDLAVALLERU ENGINEERING COLLEGE**

(An Autonomous Institute with Permanent affiliation to JNTUK, Kakinada)

SESHADRIRAO KNOWLEDGE VILLAGE::GUDLAVALLERU

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



#### **CERTIFICATE**

This is to certify that the Industrial / Practical Training project Report entitled "CRIME RATE PREDICTION" is a bonafide record of work carried out by K.OOHA N V SRI LAKSHMI, G.VYSHNAVI DURGA, D.S L PRASANNA and B.BALA SANDEEP in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering of Jawaharlal Nehru Technological University Kakinada, Kakinada during the academic year 2019-2020.

SK.SALMA BEGUM

(Industrial/Practical Training Coordinator)



#### **INTERNSHIP REPORT APPROVAL FORM**

May 24, 2019

With immense pleasure, this is to approve that the students of Gudlavalleru Engineering College i.e,

Ooha Naga Venkata Sri Lakshmi Kancharla(17485A0510), Vyshnavi Durga Getta(16481A0555), Sai Lakshmi Prasanna Dusanapudi(16481A0545) and Bala Sandeep Boppana(17485A0504)

successfully completed their Project and Project Report on "Crime Rate Prediction" under our guidance.

We are highly impressed with the work that they have done and commend them on their quick grasping skills. They have shown good intent to learn and have put the knowledge gained into application in the from of this project. We appreciate the hard work and commitment shown by them.

We, hereby approve that this document is completely checked and accepted by SmartBridge Technical Team. Its been an absolute pleasure to educate and mentor these students. We hope that this document will also serve as a Letter of Recommendation, to whomsover applied.

We wish them success in all future endeavors and a great career ahead.

Akshay kumar Kothuri

AI and IOT Developer

#### ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion of any task would be incomplete without the mention of people who made it possible and whose constant guidance and encouragements crown all the efforts with success.

We feel elated to express our floral gratitude and sincere thanks to **Dr.S.Narayana**, Head of the Department, Computer Science and Engineering for his encouragements all the way during analysis of the project. His annotations, insinuations and criticisms are the key behind the successful completion of the project work.

We would like to take this opportunity to thank our beloved principal **Dr.P.Ravindra Babu**for providing a great support for us in completing our project and giving us the opportunity for doing project.

We would like to take this opportunity to thank Smart Bridge Educational Services PVT Ltd. for providing this training program and support for us in completing our project.

Our Special thanks to the faculty of our department and programmers of our computer lab. Finally, we thank our family members, non-teaching staff, attendants and our friends, who had directly or indirectly helped and supported us in completing our project in time.

Team members
K.Ooha N V Sri Lakshmi(17485A0510)
G.Vyshnavi Durga (16481A0555)
D.S L Prasanna(16481A0545)
B.Bala Sandeep(17485A0504)

#### **ABSTRACT**

Crime Report prediction project's main idea is to implement an automated software application for maintaining the proper crime rate as per given population of people and years of crimes were done in previous years. By using this application polices/officials can prevent the crime before, so crime rate will decrease. And machine learning have become a vital part of crime prevention by predicting crime\_percapita as per years and populations and crimes happened. Machine Learning is a type of artificial intelligence that recognizes patterns using data analysis. A computer can learn and make predictions from data through machine learning. Machine learning can be divided into three main categories: Supervised Learning, Unsupervised Learning and Reinforcement Learning. In this paper, supervised learning methods are used to predict crime categories.

#### **INDEX**

TITLE		PAGE NO
ABSTRACT		
1.	INTRODUCTION	1
	1.1. OBJECTIVE OF RESEARCH	1
	1.2.PROBLEM STATEMENT	2
	1.3. INDUSTRY PROFILE	2
2.	REVIEW OF LITERATURE	3
3.	DATA COLLECTION	4
4.	METHODOLOGY	6
	4.1. EXPLORATORY DATA ANALYSIS	6
	4.1.1.Figures And Table	6
	4.2 Statistical Techniques And Visualization	8
	4.3 Data Modeling And Visualization	12
5.	FINDINGS AND SUGGESTIONS	14
6.	CONCLUSION	15