



# **Empirical Analysis for Crime Prediction and Forecasting Using Machine Learning and Deep Learning Techniques**

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# OBJECTIVE/GOALS/SCOPE

- The main intention of this project is to predict the crimes in particular location before they happen in order to increase safety in that area by using Machine Learning techniques so that would ease the work, reduce time for the above and provide a more informative data to the public users.
- 1. Methods for predicting crimes: Forecasting the time and place of an increased crime rate area.
- 2. Methods for predicting offenders: Identify individuals with a high risk of offending.

# OBJECTIVE/GOALS/SCOPE

3. Methods for predicting perpetrators identities: Determine profiles that match with likely offenders with past crimes.
4. Methods for predicting victims of crimes: Find individuals with a high risk be-coming a target for an offender.

# EXISTING SYSTEM

- \* Some type of news such as various bad events from natural phenomenal or climate are unpredictable.
- \* When the unexpected events happen, there are also fake news that are broadcasted that creates confusion due to the nature of the events.
- \* Very few people know the real fact of the event while the most people believe the forwarded news from their credible friends or relatives.

# EXISTING SYSTEM

- \* These are difficult to detect whether to believe or not when they receive the news information.
- \* Crime prediction and criminal identification are the major problems to the police department as there are tremendous amount of crime data that exist.
- \* There is a need of technology through which the case solving could be faster.

# PROPOSED SYSTEM

- Here it provides the result as crime rate in some specific location along with the red zones and highly occurring crimes in that area.
- There is an additional feature which removes the fake crime reported by machine learning.
- This work helps the law enforcement agencies to predict and detect crimes in improved accuracy and thus reduces the crime rat

# PROPOSED SYSTEM

- Creating a website that helps the police department to analyse and predict the crime rate of a particular area using Machine Learning technique.
- Help people travelling to different place to understand the crime trends of a particular area.
- Enable the common people to file a complaint through online portal as well as track their complaint.

# BENEFITS

- The objective would be to train a model for prediction.
- The training would be done using the training data set which will be validated using the test dataset.
- Building the model will be done using better algorithm depending upon the accuracy to predict the crime rate.
- Visualization of dataset is done to analyse the crimes which may have occurred in the country.



# BENEFITS

- The aim of this project is to make crime prediction using the features present in the dataset.
- The dataset is extracted from the official sites.
- With the help of machine learning algorithm, using python as core we can predict the highest of crime action which will occur in a particular area or district.

# REQUIREMENTS

- **SYSTEM SPECIFICATION:**

- **HARDWARE REQUIREMENTS:**

- ❖ **System** : Pentium IV 2.4 GHz.
- ❖ **Hard Disk** : 40 GB.
- ❖ **Floppy Drive** : 1.44 Mb.
- ❖ **Monitor** : 14' Colour Monitor.
- ❖ **Mouse** : Optical Mouse.
- ❖ **Ram** : 512 Mb.

# REQUIREMENTS

## SOFTWARE REQUIREMENTS:

- ❖ **Operating system** : Windows 7 Ultimate.
- ❖ **Coding Language** : Python.
- ❖ **Front-End** : HTML, CSS. HTML, CSS.

# MODULES SPLIT-UP

- Data Pre-processing
- Prepare Data
- Feature Selection
- Building and Training Model













