

**MANIPAL INSTITUTE OF TECHNOLOGY**

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**BLACK AND WHITE IMAGE COLORIZATION WITH OPENCV AND DEEP LEARNING**

*By*

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**INDEX:**

1. **INTRODUCTION**
2. **PROBLEM DEFINITION**
3. **OBJECTIVE**
4. **SCOPE/IMPORTANCE OF PROJECT**
5. **METHODOLOGY**
6. **REFERENCES**
7. **INTRODUCTION**

We attempt to apply techniques from Machine learning to data from

a dataset released by the government on crime in a city. We would apply K-means clustering as a way of compartmentalizing the records of crime. We will propose methods of "predicting" crimes based upon the clustered data.

1. **PROBLEM DEFINITION**

By analysing the data in a mathematically rigorous way, one might be able to glean insight into the underlying causes of crimes, and also may be able to **figure out indicators of future crimes to occur**. All of this categorization and analysis would be done under the umbrella of Data Mining, a field which analyses large sets of data using probability and statistics, and makes useful conclusions from the analysis.

1. **OBJECTIVE**

Criminology theories suggest that certain types of sociological parameters (income, presence of authority etc.) determine and predispose people to commit crimes. We hope to use the data to prove or disprove these hypotheses in order to better understand criminal behavior and whether they can be reduced. Overall, we hope to make the world a safer and secure place for its inhabitants.

1. **SCOPE/IMPORTANCE OF PROJECT**
2. **METHODOLOGY**
3. **REFERENCES**