IJARSCT





International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal



Volume 5, Issue 7, April 2025

Child Labour Reporting Application

Apurva R.Darokar¹, Sanika S. Khire², Akanksha A. Yadgire³, Om K. Mokode⁴, Prathamesh G. Rayke⁵, Prof Ashwin J. Ade⁶ Students, Department of Information Technology^{1,2,3,4,5}

Professor, Department of Information Technology SIPNA College of Engineering & Technology, Amravati, India

Abstract: Crime is a huge menace in almost every State of the world, especially in underdeveloped countries with galloping crime rates. Data in these places are often stored in records manually, thus hampering the connectivity of different records. This forces the investigation officer to search for clues and leads by himself, in order to arrive at the possible suspects involved in recent crimes. Serial offenders most of the time make use of a distinguishable pattern when committing crimes, known as the modus operandi. In this work, we propose a machine learning-based predictive policing system that utilizes both the modus operandi of recent crimes and existing criminal records. Working with the model is aimed at predicting and generating a list of suspects who might be linked to recent crimes so as to enable the police investigation process. Implementation of our model consists of a few key stepping stones. First, we need to collate reliable and competent data from various police departments. This will ensure that we have an entire dataset covering a wide range of criminal activities. After that, we need to focus on extracting features from the data, which establish patterns and distinguishing characteristics in the modus operandi of each individual criminal. These features are instrumental in training our machine learning model to recognize and predict possible suspects from new crime evidence. Our model predicts a suspect or a group of suspects by analysing the crime data and learning from past incidents. Once a recent crime is committed, it correlates the modus operandi of the present incident with that of the past ones contained in the database of the model; thus, generating today's list of potential suspects in order of their likelihood of involvement. The validation using real data of our model achieved promising results, increasing greatly the accuracy and speed of suspect identification, particularly with regard to those who have been involved in crimes in the past. This computerization permits the investigation officer to direct his work toward the most likely suspects, thus increasing efficiency and practical effectiveness. In other cases, it can be reconfigured. Different areas and instances of the crime can customize it, thus making it a multipurpose tool for law enforcement agencies. With its success in identifying potential suspects, the model demonstrates the capability of machine learning to change the traditional ritual of policing. It is giving a strategic advantage in the fight against crime, thus aiming at decreased crime rates and increased global public safety. It shows the potential of predictive policing algorithms to change the world and prepares the ground for further development in this area. Our mission is to help law enforcement agencies utilize technology to combat crime more effectively and make communities safer.

Keywords: Crime

Copyright to IJARSCT www.ijarsct.co.in



DOI: 10.48175/568



520