

EVALUATION OF CRIME DOCUMENT USING RETRIEVAL TECHNIQUES

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ABSTACT:

This paper presents the Deep Evaluation of a system that help in analysis and make available relevant of crime information extracted from the "Application of INFORMATION RETRIEVAL AND SCIENCE Like TEXT CATEGORIZATION and STRUCTURED Data(Extensible markup language). Clustering technique are used to Retrieve the Crime case Documents and analysis the identifying the crime proofs.

The feature of a systematic review is the data collection, the assembling of meticulous, unbiased and indicators is performed using Neural Network where it's a model to predict specifying types of crime using time information to predict a crime's location.

These neural models are able to predict the types of crimes being committed. Classification and Clustering algorithms are heavily used to retrieval the Document based search engines techniques. We can use automatically applying labels to database such as evidence, footwear prints or Images.

Multinomial model: These model is overly simplistic, as it does not model the number of times that terms crimes evidence occurs in a Document. When crime cases are very short, it is unlikely that many evidences will occur more than one time, and therefore the multiple- Bernoulli model will be an accurate crime case model. However, The crime evidence document contain documents that are both short and long, and therefore it is important to take term frequency and, subsequently, document length into proof of Evidence.

The aim of this paper is to Significate faster Database, gained through a systematic search how to guide for future evidence like Footwear prints and crime scene marks.

INTRODUCTION:

The system will collect, evaluate, and gives the relevant criminal judgement to crime documents. Here Neural network, Classification and clustering techniques are used to specifies types of crimes by the retrieval techniques. And provides the exact evidence of criminal profile. Retrieval process from a large database can be made significantly faster if the database footwear prints of the criminal are clustered beforehand. There are many possible ongoing evidence are done to improve the crime document clustering and neural network techniques such as Extracting and clustering approaches to overcome by designing the pattern of the crime based on the evidence such as footwear prints, marks on the body are identified based on the prediction of similarity of the crime.

The Objective of crime by Visualization and Retrieval of Crime Documents:

The Clustering and Neural networks can be executed in the following steps "TO VISUALIZE THE CRIME DOCUMENT":

- . Partition of the crime case into the cluster of datasets.
- . Identifying crime case cluster centroids (mean point) of current of evidence of the crime.
- . Assigning each crime point evidence to specific cluster
- . Observe the related crime evidence from each point and allot point.
- . After re-allotting the view of crime evidence we can find the criminal by new evidence.

CRIME DOCUMENT BY THE CLASSIFICATION OF RETRIEVAL TECHNIQUES:

Clustering the crime documents into multiple categories based on the search tags, retrieval of crime, by tokenizing the document, topic and content of the document. Here Clustering and Neural network plays an important role in terms of prediction and visualization the crime evidence. Clustering is the tasks of grouping the database of the crime and detection the rule engine to identify the criminals. The initial processing of the crime documents is needed to represent the user term frequency to identify the retrieved document of crime.

FRAMEWORK OF NEURAL NETWORKS FOR EVALUTION OF CRIME DOCUMENT USINH RETRIVAL TECNIQUES.

Neural Networks is a machine learning part that tells about classification and prediction problems that helps crime to detect and report the result. NNs can solve complex problems. NNs are widely used in every sector of industries like crime, engineering and crime etc.

NNs learn through one of two mechanisms: supervised learning which requires historic data with known results, and unsupervised learning which learns patterns directly from the data. Both techniques require that the NN be trained in order to learn and various training algorithms exist for use in each type of NN learning, with backpropagation being the most popular for supervised learning and self-organizing maps.

NN MODELS TO PREDICT THE CRIME DOCUMENT.

As we know that NNS can solve complex problems. We can develop the models. Models are developed by using supervised learning architectures.

DATA:

At the starting of the case the main goal is to collect the data so that problem could be solved within less idea. This NN model is used at the staring of the case. To collect the data and check the data if it is correct.

STEPS OF COLLECTING THE DATA:

STEP 1: REVIEWING THE CRIME LOCATION:

Starting the detective or police will review the location to collect the evidence. They check the entire location even if required the call for more force. Because of reviewing the location data is collect is will be the initial and main process in collection of data.

STEP 2: AFTER THE COLLECTION OF DATA:

The records as grouped by criminal charge number, The crime codes associated with each cluster are defined in the Appendix. Other data include date, time stamp, the day of the week, the hour of a day,



longitude and latitude of the crime. And to get results they might take more years and less than a day it depends on the crime.

PREDICTION OF CRIME USING NNs:

The NN model's is used to predict what crime is occurring when given only location and time information. For a country they will be having specific number to contact with a nearest police station. When a crime is occurring if they are unable to describe the crime this might be viewed as a preparatory model for detective or police. They are assigned to near by police station to specific the day of the week and time of the event and consequently hearing a call for a help. The goal of the NN is to predict the most likely crime that is occurring in order to better prepare police response.

PREDICTION OF CRIME LOCATION USING NNs:

NN models is well know for the prediction after getting the call.

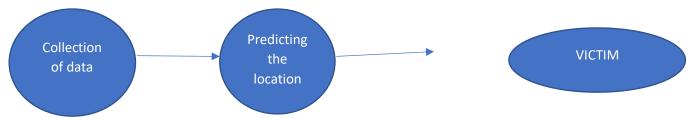
NN models is used to predict the location of the specific crime where time of day and day of week are known. When the emergences call comes in and the crime reported. They need to ensure that victim is present in the location or not. After all this detective or police should occur to the location and check the CCTV to get some proofs.

Such could occur if the reporter were a visitor to the city or was in some other way unable to determine their location, such as a kidnap victim in the trunk of a vehicle. The goal of this NN is to predict the most likely zip code. NN is also used in the prediction of the geographical locations.

Both the NN to predict a crime given the location and time and the one to predict the zip code region of a crime given the crime and time focus on spatiotemporal relationships. Both NNs are ambitious in attempting to predict a specific crime happening at a specific time or a generalized location of a crime.

After getting know the location and the victim and detective or police will find there way to the victim t

DIAGRAM OF EVALUTION OF CRIME DOCUMENT USINH RETRIVAL TECNIQUES.



The collection of data, predicting the location or collecting evidence at last getting the victim. This all deals with NN models for the prediction.

CONCLUSION: We have used NN models, Clustering, neural network for the predicting the location and even collecting the data and it is the most powerful tool when it comes to prediction of crime documents.

This paper helps to increase communication between police and public. These skills of management of evidence and identifying the crimes are integrated and evaluated by Retrieval Database with proper investigation. Here we are using the clustering technique and Neural Network because it's more powerful to forming accurate cluster, speed of creating cluster identifying Evidence crime trend and crime zone, collection of proofs and crime density of state.



REFERENCES:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8529125/

Brainerd, C. J., & Reyna, V. F. (2005). *The Science of False Memory*. Oxford, UK: Oxford University Press.