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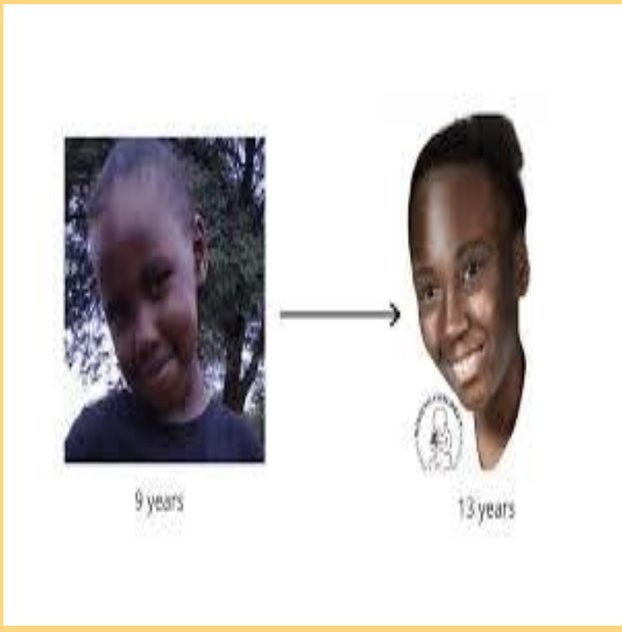
Role Of Artificial Intelligence In Solving Missing Persons Using K-Nearest Neighbor Algorithm and Comparing with Convolutional Neural Network

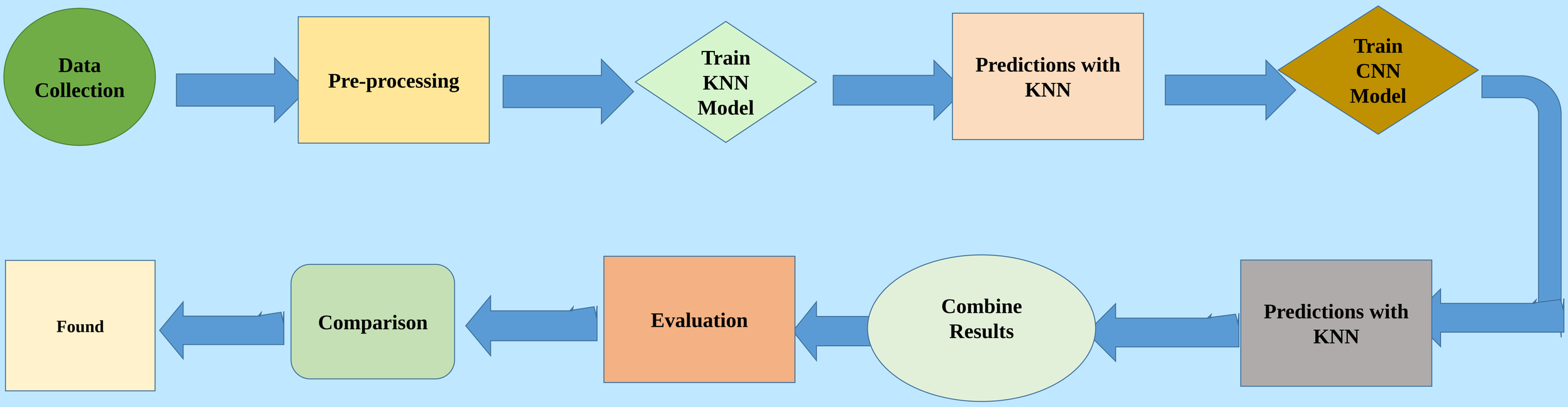
INTRODUCTION

- AI can analyze visual data such as surveillance footage and satellite imagery to detect and recognize individuals, aiding in the identification and localization of missing persons in various environments.
- The study's objectives include employs advanced algorithms to analyze vast amounts of data, including demographics, behavior patterns, and last known locations of missing persons, facilitating more comprehensive and targeted search efforts. AI algorithms can analyze Patterns, Finger Prints and it can match images of missing persons
- AI algorithms can analyze large datasets and extract meaningful insights to guide search efforts and prioritize areas of interest Existing methods struggle with complex factors affecting the missing persons. utilizing natural language processing algorithms, AI extracts insights from textual data sources like social media posts and news articles, providing valuable information about the missing person's activities, relationships, and potential whereabouts.
- KNNs possess the capability to comprehend the entirety of the data, leading to more precise predictions of missing persons compared to CNN.



Finding Missing Persons using AI

MATERIALS AND METHODS

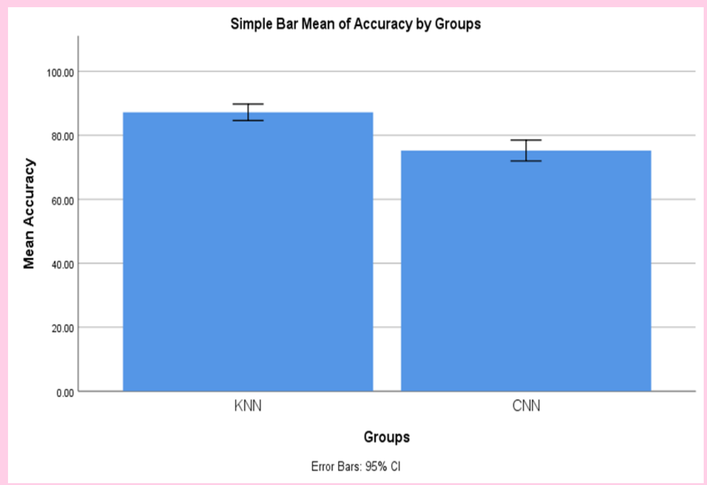


Block Diagram for finding Missing Persons using KNN And CNN

RESULTS

KNN Mean Accuracy

CNN Mean Accuracy



KNN AND CNN Mean Accuracy

DISCUSSION AND CONCLUSION

- The K-Nearest Neighbor algorithm is compared with the algorithm to predict the future missing persons using Ai
- To match surveillance camera realtime video footage with facial images of people who have gone missing
- By performing the experiment KNN algorithm has achieved an accuracy of 87.20% and CNN memory has achieved an accuracy of 75.25%
- The significance value for this research is found to be p= 0.001 after performing the Independent samples T-test analysis
- The aim of the present experimentation research is to improve the accuracy of finding missing persons using ai
- Practical applications and success stories demonstrating the efficacy of KNN in aiding law enforcement agencies in locating missing individuals.

Presents the Statistical Analysis Results of the KNN Algorithm and the CNN Algorithm

	Algorithm	N	Mean	Std.Deviation	Std.Error Mean
Accuracy	KNN	10	87.2000	2.5884	1.1575
	CNN	10	75.2500	3.2714	1.4630

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