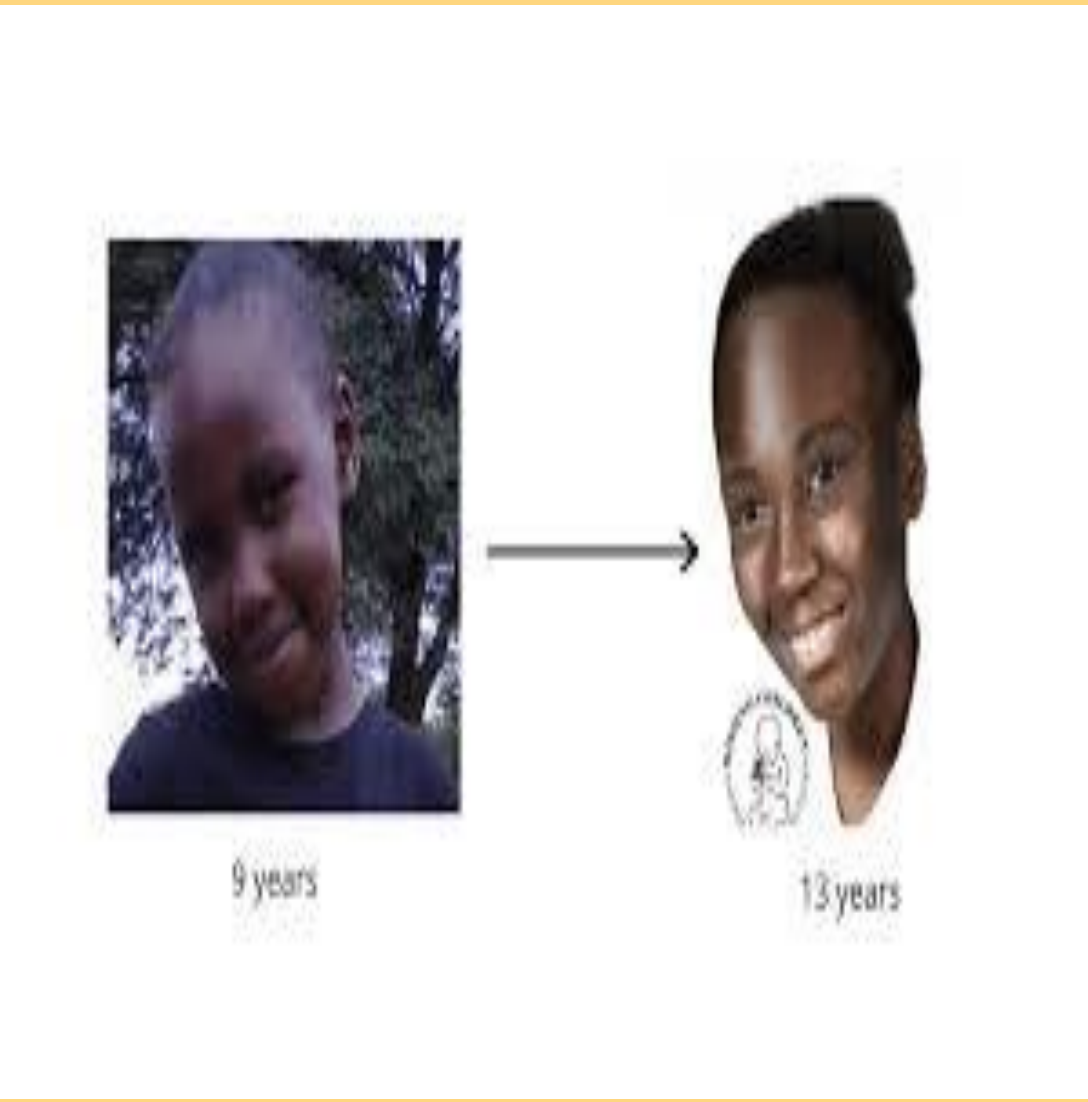


Role Of Artificial Intelligence In Solving Missing Persons Using K-Nearest Neighbor Algorithm and Comparing with Support Vector Machine

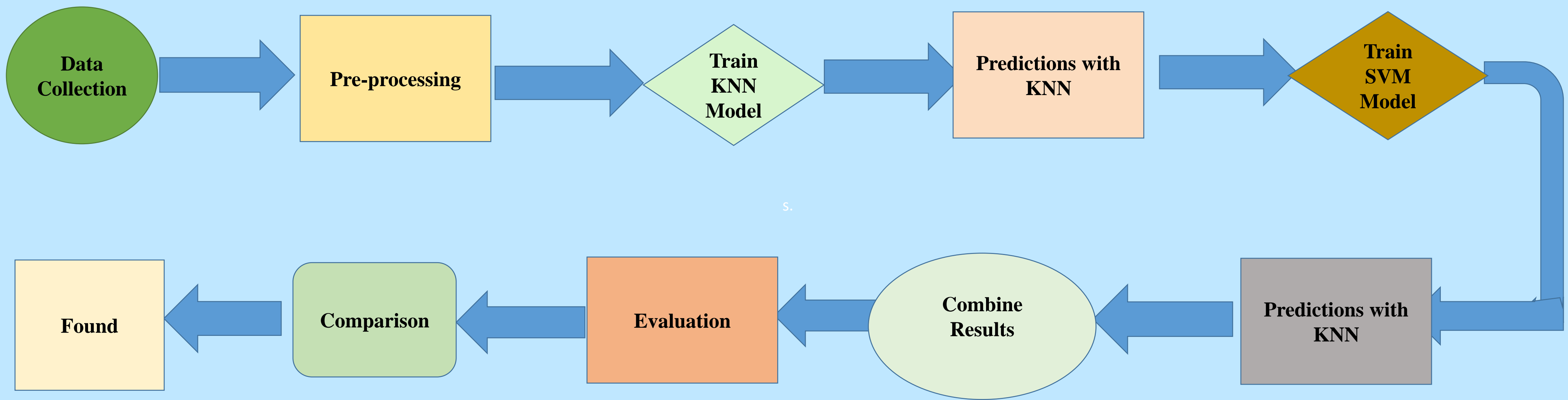
INTRODUCTION

- SVM's relevance in missing persons investigations, particularly in scenarios characterized by nonlinear relationships and intricate patterns , AI algorithms can analyze Patterns, Finger Prints.
- SVM is more suitable for analyzing sequential data and capturing temporal dependencies, making it well-suited for scenarios with time-series data or dynamic behavioral patterns and ;it analyze the various data points to predict the likelihood of person
- KNN's suitability for missing persons cases, owing to its ability to identify similarities between instances and make informed predictions based on proximity in feature space and it analyze the text data such as social media post or messages
- AI's capacity to analyze vast datasets, discern patterns, and facilitate more efficient resource allocation in search and rescue operations. It can automate alerts and notifications to relevant authorities or communities
- An in-depth exploration of the Support Vector Machine algorithm, elucidating its capacity to delineate complex decision boundaries and handle high-dimensional data. Practical applications and success stories demonstrating the efficacy of KNN in aiding law enforcement agencies in locating missing individuals.



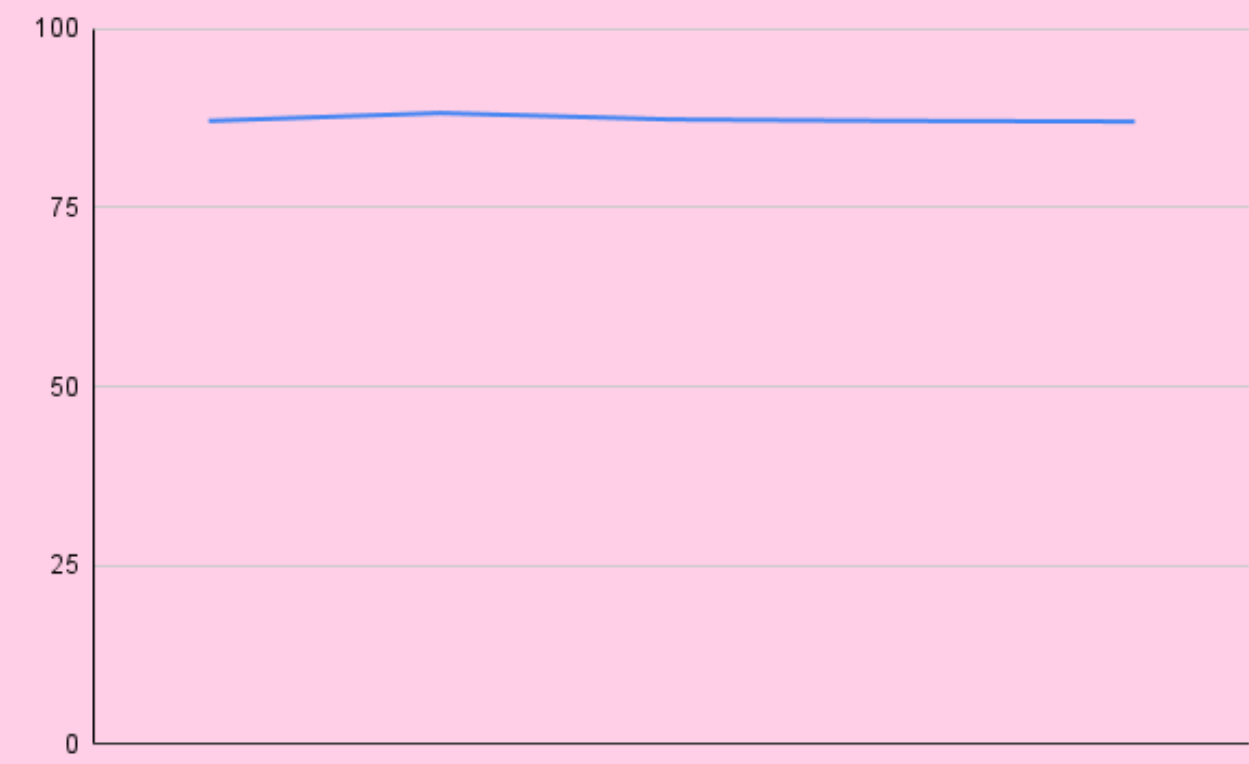
Finding Missing Persons using AI

MATERIALS AND METHODS



Block Diagram for finding Missing Persons using KNN And SVM

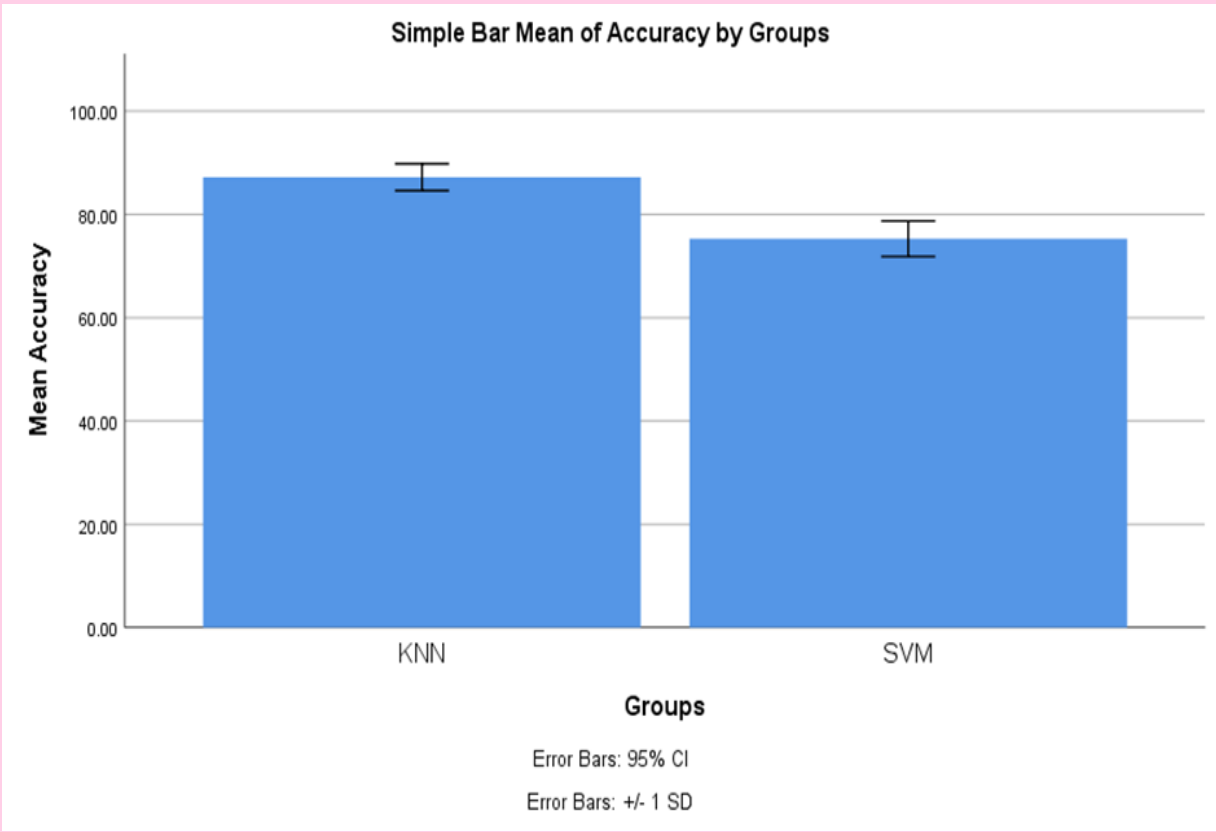
RESULTS



KNN Mean Accuracy



SVM Mean Accuracy



KNN AND SVM 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 SVM memory has achieved an accuracy of 75.27%
- The significance value for this research is found to be $p = 0.001$ after performing the Independent samples T-test analysis
- Practical applications and success stories demonstrating the efficacy of KNN in aiding law enforcement agencies in locating missing individuals.
- AI algorithms can analyze large datasets and extract meaningful insights to guide search efforts and prioritize areas.

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

Accuracy	Algorithm	N	Mean	Std.De viation	Std.Er ror Mean
	KNN	10	87.2000	2.5884	1.1575
	SVM	10	75.2720	3.4339	1.5356