

In a world teeming with technological advancements, the quest to find missing persons has taken a groundbreaking turn through the integration of Artificial Intelligence (AI). This report delves into the innovative fusion of dlib, JSON (JavaScript Object Notation), and the K-nearest neighbors (KNN) algorithm, presenting a formidable methodology for locating individuals who have become lost or unaccounted for. The amalgamation of dlib's facial recognition capabilities, JSON's versatile data interchange format, and the robust KNN algorithm forms a dynamic trio that transcends traditional search methods. AI has become an indispensable ally in addressing the challenges associated with locating missing persons by leveraging the power of data analysis, pattern recognition, and real time decision-making. As we navigate through the intricate landscape of this cutting-edge approach, we will explore the individual contributions of dlib, JSON, and the KNN algorithm, unveiling the synergy that propels their collective efficacy. The transformative potential of this integrated solution extends beyond conventional methods, offering a paradigm shift in the way we approach and resolve cases of missing persons. Join us on this journey into the realm of AI-driven search and rescue, where the fusion of technology and empathy opens new avenues for reuniting loved ones and ensuring the safety and well-being of individuals in distress.

### 1.2 Reason for the Project

Every day, a countless number of people around the world go missing, including children, teenagers, mentally challenged individuals, and elderly people with Alzheimer's disease. Unfortunately, many of them remain unaccounted for. This paper suggests a solution that can aid both law enforcement and the general public in finding missing individuals more quickly by using facial recognition technology. Facial recognition technology has numerous applications, but one of its greatest benefits is finding missing persons. To simplify the process of locating missing individuals, we plan to develop an application that can be accessed by volunteers, allowing us to find the missing person in a shorter period of time. This will make it easier for law enforcement to find the specific person they are looking for. In addition, there is a need for automation to help identify missing individuals by comparing images and determining if they have similar characteristics. This will help determine if the missing person in the image captured from a specific location is indeed the person they are looking for. Our application will have a feature that saves all of the missing person's data, allowing the system to detect that image data and track the missing person. As technology advances, facial recognition and detection have become the primary means by which we identify individuals. This technology has seen significant growth in recent years, making it easier to identify individuals with ease. The purpose of our project is to create a tool that can aid in the search for missing persons. This tool will be accessible to both the general public and the police department, allowing them to quickly locate loved ones who have gone missing. The project includes a comprehensive database of missing persons, allowing police to investigate cases and guardians to file reports. Additionally, individuals can upload images of missing persons, which will be compared to the images in the database, resulting in a match.

### 1.3 Motivation

Physically it takes huge time, as it is lengthy procedure for finding missing person as it increases time to launch an FIR in police station. Also during busy process workforce for searching missed person is not so great and due to this half of the cases remain mysterious. An alarming fact about India's missing children is that 296 children go missing every day on average. And every month, that is a disturbing number of 9,019, half of them remain untraceable. Shockingly, when India was dealing with the Covid-19 pandemic in 2020, the total number of children missing across India was 1,08,234, according to the National Crime Records Bureau data. 33,456 girls were reported missing and 15,410 boys were missing, and 2,43,661 of them remained

untraceable till the end of the year. However, the statistics are indicative of the absence of a national Missing Children's repository. "There are no budgets earmarked for tracking missing people," said an official source. The motivation behind harnessing artificial intelligence (AI) for the task of finding missing persons is deeply rooted in the imperative to enhance the efficiency and effectiveness of search and rescue operations. Time is often of the essence in these cases, and AI presents a compelling solution by rapidly processing vast amounts of data. The utilization of advanced technologies, such as facial recognition and biometric analysis, aims to bring a heightened level of precision and accuracy to the identification process, thereby reducing false positives and directing resources more strategically. The scalability and efficiency inherent in AI systems are particularly crucial, allowing for the simultaneous analysis of diverse information sources and coverage of extensive areas in a fraction of the time required by traditional manual methods.