

DECLARATION

We hereby declare that the Capstone Project Phase - 2 entitled **“Efficient Proximity Detection Safety System”** has been carried out by us under the guidance of Dr.M.Farida Begam and submitted in partial fulfillment of the course requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering** of **PES University, Bengaluru** during the academic semester June - Nov 2024. The matter embodied in this report has not been submitted to any other university or institution for the award of any degree.

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ABSTRACT

In recent years, there has been a growing concern for the safety and security of individuals, especially in emergency situations. To address this concern, we propose a novel system that leverages modern technology to provide timely assistance to individuals in distress. Our system utilizes live location tracking and facial recognition technology to aid individuals in emergencies and assist law enforcement agencies in apprehending criminals. The core functionality of our system involves the real-time tracking of the user's location using GPS technology. In the event of an emergency, such as a threat to personal safety, the user can trigger an alert through a dedicated mobile application. Upon receiving the alert, our system automatically dispatches the user's live location to the nearest law enforcement agency. In addition to live location tracking, our system incorporates facial recognition capabilities to enhance security and aid law enforcement efforts. In instances where the user is able to capture an image of a suspect or criminal, the system analyzes the photo using advanced facial recognition algorithms. This analysis enables the system to identify potential suspects and provide law enforcement agencies with valuable leads to expedite investigations. This project aims to develop an innovative EPDS System that leverages advanced technologies to provide rapid assistance to individuals in distress. The system utilizes real-time location tracking, image processing, and machine learning techniques to detect and respond to emergencies effectively. By combining GPS technology with AI-powered image analysis, the system can accurately identify the user's location and assess the severity of the situation.

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