

NIRBHAYA: A Step Towards Safer Streets

Janhavi V. Shelar¹, Sachita P. Sonawane², Riya Y. Thormise³

Department of Information Technology¹⁻³

K. K. Wagh Polytechnic, Nashik

Abstract: *Women's safety is a major concern in today's society. This project focuses on the design and study of a real-time personal safety system using an AI-based public surveillance approach. The system observes movement patterns to detect unsafe situations such as sudden falls or abnormal behavior.*

The proposed system is developed using existing technologies and follows a scalable and reliable system architecture. Special importance is given to user privacy by avoiding identity-based monitoring and focusing only on behavior analysis.

The project is implemented in a phased manner, starting with essential system components. This work demonstrates that an effective, reliable, and ethically responsible safety system can be developed to enhance women's security in public areas.

Keywords: Women's Safety System, Microservices Architecture, Real-Time Data, AI Anomaly Detection, Data Privacy, GDPR, DPDPA, Flutter, Polyglot Persistence, Event-Driven Architecture

