IJARSCT



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 8, April 2025



Accident Detection and Notification Platform using Neural System

V. Kavitha, S. Akshaya, R. Elakkiya, R. Sowmiya

Department of Computer Science and Technology Vivekanandha College of Engineering For Women (Autonomous), Tiruchengode, India kavithavelusamycse@gmail.com, akshayasaravanan022@gmail.com, elakkiyaramesh126@gmail.com,,ramesh1234567ras@gmail.com

Abstract: The Accident Detection and Notification App is an innovative solution designed to enhance road safety and improve emergency response times. Using a combination of real-time data from mobile device sensors such as accelerometers, gyroscopes, and GPS the app detects sudden vehicle impacts or erratic movements that may signify an accident. Upon detection, the app automatically generates an alert with critical accident details, including the exact location and nature of the incident, and sends this information to emergency responders, local authorities, and predefined contacts. This instantaneous communication reduces delays in response, ensuring timely assistance. Furthermore, the app provides a user-friendly interface for easy setup and operation, and integrates features like accident history tracking, live location sharing, and a one-touch emergency call system. By harnessing mobile technology and machine learning, the app aims to not only provide quick alerts but also continuously learn from accident patterns to improve detection accuracy and response efficiency, ultimately contributing to a safer and more connected road network.

Keywords: Machine Learning, Internet of Things





350