IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 6, Issue 3, February 2026
Impact Factor: 8.2

FlashAid: Smart Ambulance Tracking System

Kalpana Shewale[1], Swarali Patil[2], Prachiti Patil[3], Shreya Navale[4]
Lecturer, CSE(IOT), A. C. Patil College of Engineering, Kharghar, India[1]
Students, CSE(IOT), A. C. Patil College of Engineering, Kharghar, India[2-4]

Abstract: *Rapid availability of ambulance services is a critical factor in saving lives during medical emergencies. In many situations, delays occur due to poor communication, lack of accurate location information, and dependency on traditional phone-based ambulance booking systems. These limitations become more severe with increasing population density, traffic congestion, and rising accident rates.*

To address these challenges, an Android-based emergency ambulance tracking application named 'FlashAid' has been designed and developed. The system provides a unified digital platform that connects patients and ambulance drivers using real-time GPS tracking and cloud-based services. FlashAid supports separate login modules for users and ambulance drivers. When a driver activates the application, the ambulance status is updated as available, allowing users to locate and request nearby ambulances instantly.

The application uses GPS technology along with Firebase real-time database to monitor live locations and manage emergency requests efficiently. Real-time tracking continues until the ambulance reaches the patient, after which the system automatically updates the ambulance status. FlashAid improves emergency response efficiency by minimizing delays, enhancing coordination, and ensuring accurate location sharing during critical situations.

Keywords: Emergency Response System, Ambulance Tracking, Android Application, GPS Technology, Firebase Database.

DOI: 10.48175/IJARSCT-31359