**A vanet-iot based accident detection and**

**Management system for the emergency rescue**

**Services in a smart city**

**Aim:**

The aim of this project is biometric sensor based accident speed dial system for the emergency Rescue service in a road accident.

**Abstract:**

With an increase in population, there is an increase in the number of accidents that happen every minute. These road accidents are unpredictable. There are situations where most of the accidents could not be reported properly to the police station on time. In most of the cases, there is the unavailability of emergency services which lack in providing the first aid and timely service which can lead to loss of life by some minutes. Hence, there is a need to develop a system that caters to all these problems and can effectively function to overcome the delay time caused by the medical vehicles. The purpose of this paper is to introduce a framework using IoT, which helps in detecting Accidental person details from the database using fingerprint sensor and notifying them immediately to corrospandand police station and hospital. This system reduces the time to report to the police of the accident situation.

**Existing system:**

In the existing system, a Novel architecture for accident management systems is Proposed. Several kinds of research have been performed on The accident management system. However the researchers do Not focus on producing an efficient solution to manage the Accident event. The random waypoint mobility and RPL A routing protocol is the best for transmitting the data wirelessly.

**Proposed system:**

In the proposed system, fingerprint sensor based speed dial system for road accident management system. This system is stored the overall peoples' details into the database for using human accident rescue time. Using IoT to collect the data from the database and send to hospital and police station.

**Block diagram:**

Arduino uno

Power supply unit

Finger print sensor

Node mcu

Cloud

RTC

Police station

Hospital

Nodemcu

Buzzer

buzzer

nodemcu

**Block diagram Description:**

Above the block diagram is containing Arduino UNO, three ESP8266, three buzzer, Biometric sensor, RTC and power supply unit. Fingerprint sensor is connected to Arduino UNO by using the UART protocol. Biometric sensor is used to get finger print from accidental person and give it to Arduino UNO. this unknown finger print send from arduino uno to ESp8266 by using UART port. ESP8266 comparing the accidental person finger print with over all peoples finger print database. If any matches found from the database, it will send to the police station for case register and again this details send from police station to corresponding hospital.

**Requirements:**

**Software Requirements:**

* **Compilre : Arduino IDE**
* **Language : c++,c**

**Hardware Requirements:**

* **Arduino uno**
* **Node mcu-3**
* **Buzzer-3**
* **Finger print**
* **RTC**
* **Power unit**