

The global epidemic of road crash fatalities and disabilities has been recognized as a major public health concern. The approach to eliminate the delay between accident occurrence and providing medical emergency facilities is to use Accident Detection and Resue System Using IoT and Deep Learning. To achieve higher accuracy, we use a combination of IoT and deep learning. IoT module contains Force Sensor, microcontroller unit, NodeMCU, Raspberry Pi ,Pi Camera, Servo Motor,GSM,GPS,LCD Display. An IoT kit is developed that detects the accident and collects all accident-related information, such as position, pressure, gravitational force, speed and sends it to the cloud.Deep learning is used for transfer learning-based pre-trained model named ResNet and InceptionResnetV2. These models are trained to classify input video into two classes, i.e., accident or not accident. If the model's output is accident, then only the accident location is shared with the emergency services.

keywords: GSM, GPS, ResNet, InceptionResNetV2,Cloud,Sensors,Deep Learning