

EmerSave: A Novel Crowdsourcing Emergency Response Application

Penubarthi, Vishnu (School: Massachusetts Academy of Math and Science at WPI)

In America, only 30 percent of calls made to emergency medical services (EMS) require medical attention, and in cases where EMS is not required or not available, others can help. Furthermore, the 9-1-1 service has indicated that it is not always able to reach people in emergencies due to factors such as overloaded call-centers or geographic distance. Other applications attempt to address this issue but can be impractical because panicked users are often unable to spend time tapping buttons on their phone during an emergency. EmerSave is an Android application developed with Android Studio and Firebase, which sends hands-free distress messages to contacts within a specified radius. The application allows the user to call for help manually or with voice recognition and can even be accessed when the phone is locked. Contacts within a specified radius receive a notification that the user needs help. With a tap on the notification, a Google Maps page is opened providing directions to the user. One of the unique features of this app, the radius-based system, was tested to determine its accuracy and had a 100% percent success rate within the messaging-radius.

Awards Won:

Fourth Award of \$500