Enhancing Access to Emergency Services through the Concepts of Geo-localization using Mobile Technologies

Abstract

This research sought to find out how the use of mobile phones could be harnessed to enhance access to emergency services particularly in developing Countries. The lack of knowledge of the street names/house numbering/addressing system poses a challenge to the whole emergency response process in that; mobile phone users are unable to direct the emergency service respondents to the site of incident requiring intervention and also the emergency service respondents are unable to easily identify the point where their services are needed thus delaying the response process.

In the light of these, the research presents a solution that would lessen the burden on mobile phone users in terms of keeping track of all the contact/phone numbers of emergency service agencies as well as being familiar with the location where the help of these emergency service agencies is needed. Also, the research solution would enable the emergency service respondents to quickly geo-locate the point a distress call emanates from. This will ensure a
quick response to emergency situations.

References


Index Terms

Computer Science Wireless

Keywords

Emergency response; Geo-location; Distress call; Caller location, CellTower ID Positioning;
Tri-lateration; Tri-angulation