



## ABSTRACT

Earthquakes and typhoons that are quite catastrophic are common in the Philippines. Earthquakes frequently occur in the country in an average of 3-5 a day which are mostly unfelt. One of the major effects of destructive typhoons and earthquakes is the significantly large number of fatalities. In post-calamity events, survivors stranded in the areas struck by the devastating natural occurrences are still at risk due to inaccessible food supplies, immobility, as well as the lack of first aid kits in their areas. Fatalities increase as days passed without emergency response. In order to seek help and contact emergency teams, communication is a must have. But, what if the communication is down and a victim has been stuck in a place unreachabeable for response teams?

Therefore the researchers come up with the study; GPS Coordinate Collector Surveillance System for Earthquake Disaster Management Operations. The system is capable of communicating with android smart phones installed with our system's application, I'm Here!, whereas it does not need internet connection. The I'm Here! application will extract the earthquake victim's GPS coordinates and send it to the surveillance system, Scout. In the application, the user can add his/her personal information for the rescuers to use it as identification. The main feature of the application is the most important which it will automatically connect



to the Scout's wireless router, when in range, and send the user's coordinates and, optionally, the user's profile (personal information). The Scout system can be supplied with a battery to make it mobile to compensate the power supply requirements of the system.

By collecting the data processed by the I'm Here application, earthquake victims can easily be located and identified. This will guarantee that fatalities can be reduced since it will increase the time needed for search and rescue operations and prevent victim of starvation and other problems associated with being stranded.