Mobile Disaster Victim Detection with Raspberry Pi and Quadcopter

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#Victim-Detection #Deep-Learning
#RaspberryPi #QuadCopter #Google-Cloud

These days, Natural disasters are more common especially in Indonesia, such as earthquake or landslide. Detecting disaster victims is more complicated than detecting ordinary pedestrian. Sometimes, victim seen only on the his/her leg, arm, head or whole body with different poses and his/her color interfered by dust or other ruins.

I proposed a system to quick search for victim in areas affected by the disaster on the air with QuadCopter (drone). The goal is generate an online map that can suggest possible location of the victim for SAR team. We proposed a system shown on Figure 1 that consist two blocks, the embedded system carried by QuadCopter and Google Cloud Server.

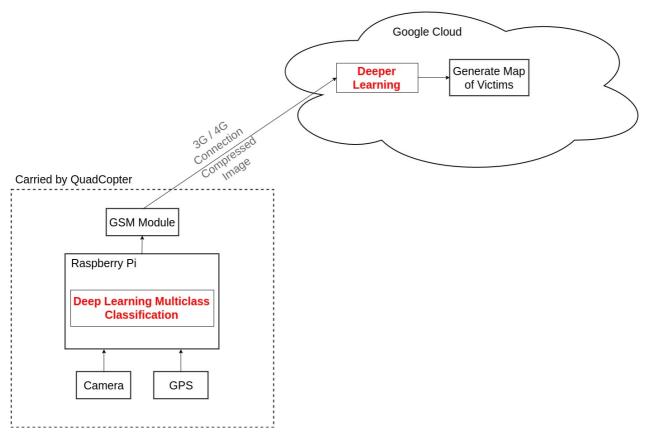


Figure 1. Proposed Embedded Device and Server Block Diagram

The QuadCopter and interfacing from Raspberry Pi to other hardware modules was fully tested.