How Can You Check If Your Home is Fine? : A Solution Offered by CSN Linked with Social Media

SASAKI, Akiko1* ; UEUMATSU, Hiroki2 ; TAKEUCHI, Tatsuya3 ; FUJIHARA, Satoru4 ; KIM, Ahyi1

1Yokohama City University, 2Senshu University, 3Yokohama National University, 4ITOUCHU Techno-Solutions

Kim et al.(2015) constructed a citizen seismic network (CSN) in Yokohama utilizing MEMS accelerometer and RaspberryPi. To make the network denser, since the network largely rely on people who put the sensor unit in their house, it is important to make sensor unit useful for them not only when earthquake occurs but also in daily life. For this purpose, we developed various applications for the network linked with social media. In the daily life, utilizing a camera module, the sensor unit can for security and/or pet monitor, and when earthquake occurs people can check inside of their house through the internet. Once the unit detect quake it will tweet to let them know that their house felt it. However, if it does not tweet anything even there are earthquake nearby, people might wonder what happened to their house. So we let sensor units make conversation to figure out who felt and did not felt using the network. Utilizing this application, we believe our sensor network enhanced its value. We will keep developing such applications so that make it more useful and let people welcome to put the sensor unit in their house.

Keywords: MEMS accelerometer, Sensor network, Twitter, Facebook, RaspberryPi, earthquake