Requests for Collaboration

Name: Daisuke YOSHIDA, Ph.D.
Current position: Associate Professor
E-mail address: daisuke@osaka-cu.ac.jp

Research Interests

Global Navigation Satellite System (GNSS) and Geographical Information Systems (GIS), and the applications for disaster reduction research and urban infrastructure maintenance.

Creative Achievements in The Application of New and Existing Science and Technology

My recent research interests are to develop applications for disaster reduction research and urban infrastructure maintenance using GNSS and GIS. For example, the one of outputs is Augmented Reality (AR) application for iOS devices (https://bitbucket.org/nro2dai/cerd-ar) that can utilize educating local citizens about regional disaster reduction. The research has been carried out as Center of Education and Research for Disaster Management (CERD) researcher.

My other activity in urban infrastructure maintenance, mainly using Unmanned Aerial Vehicle (UAV) and how to maintain infrastructure effectively. The work is collaborating with some local governments in Osaka, Japan and private companies. We have conducted some experiments in Osaka and have discussions regularly about the accuracy, costs, safeness and how to implement into their actual tasks.

Technology (Product, Process, Device, Service etc.) That I Want to Request for Collaboration

- Effective visualizing technology of GIS data such as AR that can easy to understand for non-professional persons.
- Deep-learning technology that can apply for monitoring and predicting various defects in urban infrastructures.

A List of 5 Key Publications

Yu W., Song X., Raghavan V., Yoshida D., Ebara H., Post-Disaster Road Traversability Mapping Based on GPS Track Sharing and Map-Matching, *International Journal of Geoinformatics*, vol.13, no.4, pp.13-23, 2017.

Yu W., Ebara H., Matsuzaki R., Yoshida D., Raghavan V., Near Real-time Mapping Using Shared GPS Data from Stranded Commuters, *The Review of Socionetwork Strategies*, Springer Japan, vol.9, no.2, pp.41-57, 2015.

Yoshida D., Realini E., Reguzzoni M., Raghavan V., Integrating Low-cost RTK Positioning Services with a Web based Track Log Management System, *Applied Geomatics*, vol.5, no.2, pp. 99-108, 2013.

Yoshida D., Realini E., Fenoy G., Raghavan V., Implementing Grid Enabled Web Services for Enhanced Positioning using Low-cost GPS Devices, *International Journal of Geoinformatics*, vol.8, no.1, pp.41-51, 2012.

Realini E., Yoshida D., Reguzzoni M., Raghavan V., Enhanced Satellite Positioning as a Web Service with goGPS Open Source Software, *Applied Geomatics*, vol.4, no.2, pp.135-142, 2012.