

## **LSGI Members Excel at PolyU Distinguished Knowledge Transfer Excellence Awards 2017**

The Department of Land Surveying and Geo-Informatics (LSGI) is honoured to announce that members of the LSGI have awarded PolyU Distinguished Knowledge Transfer Excellence Awards 2017 presented by the PolyU Technology & Consultancy Company Limited (PTeC) and Institute for Entrepreneurship (IfE).

### **Community Excellence Award – Merit Award**

Dr Lilian Pun Cheng Shuk-ching and Ir Dr Geoffrey Shea Yu-kai are awarded the Community Excellence Award (Merit Award), which aimed to award projects that create community and social values while enhancing the well-being of the society, for their project, “Development of a Multi-modal Public Transport Query and Guiding System - HK eTransport.



The Hong Kong eTransport system was launched in 2009 providing a comprehensive solution on route configurations and modes of public transport. It was developed based on the collaboration between Transport Department and PolyU to enhance the latter’s proprietary “EasyGo” system. Key features of the system include providing multi-modal information (such as railway, bus, mini-bus, ferry and trams of all companies), multi-criteria route solution (by time, fare, interchange of stops, choice of the mode of transportation) and different operating times using geomatics technology. In 2016, it reached an average of 26,000 daily users and 1.6 million mobile downloads. The researchers continue to provide upgrades to the system and tackle the challenges on concession and interchange concession fare.

### **Research Excellence Award – Merit Award**

Prof. Ding Xiaoli, Dr Zhang Lei, Mr Yang Wentao and Prof. Chen Wu are awarded the Research Excellence Award (Merit Award), which aimed to award research projects that generate new discoveries, methodologies and innovative solutions for application to real-life issues, for their project on “Satellite-Based Geohazards Monitoring Technologies”.



The geohazards monitoring technologies were developed for geohazards detection, monitoring and management. Two main streams of technologies have been developed, i.e., those based on GNSS (Global Navigation Satellite Systems such as GPS) and InSAR (Interferometric Synthetic Aperture Radar). The GNSS technologies involve innovations in hardware design, software modules and specialised data processing models and algorithms. The researchers have developed several generations of multi-antenna GNSS technologies, which have become an industry standard for monitoring landslides and structural safety. Implementation of the technologies in several countries was successfully carried out through consultancy services to ensure a safe living environment by monitoring the deformation of various objects such as slopes and dams. The InSAR gathers and processes satellite radar remote sensing images to obtain information on the Earth. The team has also developed innovative InSAR data processing models and algorithms to produce more accurate and reliable measurement results.

The Department congratulates all members on the receipt of the PolyU Distinguished Knowledge Transfer Excellence Awards!