

LSGI Research Seminar

Generating 3D semantic building models using crowdsourcing street-level image data

Date: 2 Dec 2021 (Thu)

Time: 15:30 - 16:30

Venue: online @ Zoom

Language: English



Prof. Hongchao FAN

Professor

Norwegian University of Science and Technology, Norway

Bio:

Hongchao Fan is full professor for 3D Geoinformatics at the Department of Civil and Environmental Engineering at the Norwegian University of Science and Technology (NTNU). He received his master's degree in Geodesy and Geoinformatics at the University of Stuttgart in 2006 and obtained his PhD at the Technical University of Munich in 2010. After his PhD study, he worked as Group Leader for 3D Data Infrastructure at the Heidelberg University in Germany. In 2018, he started his work as professor at NTNU in Trondheim, Norway. His research interests include 3D city modelling, spatial data mining from VGI data, Photogrammetry, and laser scanning.

Abstract:

LoD3 Buildings with detailed façade elements are of vital importance in many applications in the context of smart cities. In this talk, Dr. Fan is going to present the recent research work about detecting and modelling 3D façade objects from crowdsourcing street-level images. After a short introduction of the most successful crowdsourcing street-level image platform Mapillary, the spatiotemporal patterns of contributions on Mapillary will be demonstrated. Then a deep learning-based approach for façade parsing and 3D modelling will be presented. On this base, a WebGL-based low-cost interactive platform has been developed aiming to collect 3D building models with semantic information. This platform will be introduced in the end of the talk.

All are welcome. To register, please click [here](#) for the details.

For enquiries, please contact Ms Anna Choi at 3400 8158 or anna.choi@polyu.edu.hk