

FACULTY OF CONSTRUCTION AND ENVIRONMENT DEPARTMENT OF LAND SURVEYING AND GEO-INFORMATICS 建設及環境學院 土地測量及地理資訊學系

PhD candidate position

The PolyU invites applications for a full-time PhD candidate position in the 3D geospatial vision research group at the Department of land surveying and geoinformatics. The group is concerned with general problems and techniques for 3D urban sensing and environmental informatics, namely with the generation, analysis and interpretation of 3D geospatial data. The group adopts and develops multi-modal sensor systems (including unmanned aerial vehicles and mobile mapping systems) to create and handle georeferenced 3D data of the built and natural environment. One of many applications is the monitoring of volumetric plants and their interaction with environment for precision forestry purposes.

The project is related to the frontier areas of active remote sensing and LiDAR and is concerned with the development of deep learning methods for processing and analyzing large-scale 3D point clouds and images to address real-world geospatial and geoscientific applications, such as carbon stock/biodiversity mapping, autonomous driving. The focus is put on carrying out the scientific investigations as well as the algorithmic implementation of system tests and accuracy studies.

Our research group is seeking for highly qualified and motivated candidates in the areas of exploiting 3D multi-modality remote sensing (multispectral imaging, laser scanning, data fusion from different platforms) and geospatial intelligent analysis (e.g. computer vision and machine learning, feature extraction, object detection and classification) for environmental and urban applications.

$\ exttt{ iny}$ Have background or knowledge in the field of photogrammetric computer vision and point cloud analysis
□ Have good programming skills
□ Be a team player, open minded, with good communication skills
□ Speak and write reasonably well English

A prerequisite for PhD is a completed university BSc/MSc degree in geomatics, computer science, photogrammetry and remote sensing, geoscience and related fields.

How to apply

Qualified applicants holding an excellent BSc/Master's degree should provide the following materials:

- 1. Cover letter briefly describing their background and motivation
- 2. CV including degree certificates / transcript of records
- 3. Date of availability
- 4. References

Please send the material via email to Prof. Dr.-Ing. W. Yao (wei.hn.yao@polyu.edu.hk). The Deadline for application is Dec 1, 2018. A doctorate study at PolyU normally demands less than 4 years to complete. The monthly salary ranges from ca. 1900 EUR to 2500 EUR and is determined according to applicant's accomplishments, experience and qualifications. The PolyU offers a premium medical insurance package for its full-time employees at no cost of employees.