

PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Civil Engineering
Supervisors	Principal supervisor: Dr. Lei Fan (XJTLU, Department of Civil Engineering) Co-supervisor: Dr. Cheng Zhang (XJTLU, Department of Civil Engineering) Co-supervisor: Professor. Kristian Krabbenhoft (UoL, School of Engineering)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Chinese title: 基于点云数据的信息提取的研究 English title: Information extraction from large point cloud datasets
Subject Areas	Civil & Structural Engineering Computer Science & IT Geography Software Engineering Applied Mathematics Statistics
Contact	Please email Lei.Fan@xjtlu.edu.cn (XJTLU principal supervisor's email address) with a subject line of the PhD project title

Requirements:

Academic qualification: The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in Civil Engineering (e.g. surveying), Geomatics Engineering, Computer Science (e.g. computer vision) or Geography (e.g. remote sensing, GIS). The candidate should have excellent programming skills (MATLAB, PYTHON or C++) and experience in spatial data analysis and statistics. Good knowledge of remote sensing, GIS and machine learning would be useful.

Language qualification: Evidence of good spoken and written English is essential. The candidate should have an IELTS score of 6.5 or above, if the first language is not English.

This position is open to all qualified candidates irrespective of nationality.

Degree:

The student will be awarded a PhD degree from the University of Liverpool (UK) upon successful completion of the program.

Funding:

The PhD studentship is available for three years subject to satisfactory progress by the student. The award covers tuition fees for three years (currently equivalent to RMB 80,000 per annum) and provides a monthly stipend of 5,000 RMB as a contribution to living expenses. It also provides up to

RMB 16,500 to allow participation at international conferences during the period of the award. It is a condition of the award that holders of XJTTLU PhD scholarships carry out 300-500 hours of teaching or research assistance work per year. The scholarship holder is expected to carry out the major part of his or her research at XJTTLU in Suzhou, China. However, he or she is eligible for a research study visit to the University of Liverpool of up to three months, if this is required by the project.

Project Description:

This project aims to develop new/improved data analytic methods for information (e.g. key data points, features) extraction from large-scale point cloud datasets to support some typical applications such as data simplification, object recognition, classification and 3D reconstruction in built environment. There will be some flexibility in terms of application cases to be considered. The accuracy of the information extracted, the computational efficiency of the methods developed, and the ways in which those can be improved will be investigated. Imagery data where appropriate can be considered to aid the information extraction.

For more information about doctoral scholarships and PhD programmes at Xi'an Jiaotong-Liverpool University (XJTTLU), please go to <https://www.xjtlu.edu.cn/en/> and Click **Study with Us**.

How to Apply:

Interested applicants are advised to email Lei.Fan@xjtlu.edu.cn (XJTTLU principal supervisor's email address) the following documents for initial review and assessment (please put the project title in the subject line).

- CV
- Two reference letters with company/university letterhead
- Personal statement outlining your interest in the position
- Proof of English language proficiency (an IELTS score of 6.5 or above)
- Verified school transcripts in both Chinese and English (for international students, only the English version is required)
- Verified certificates of education qualifications in both Chinese and English (for international students, only the English version is required)

Informal enquiries may be addressed to Dr. Lei Fan (Lei.Fan@xjtlu.edu.cn), whose personal profile is linked below,

<https://www.xjtlu.edu.cn/en/departments/academic-departments/civil-engineering/staff/lei-fan>

Appendix: Subject Areas

Please kindly be noted that subject areas are added to increase the visibility of your project on www.findaphd.com.

Biological & Medical Sciences

- Agricultural Sciences
- Biochemistry
- Bioinformatics
- Biomedical Engineering
- Biophysics
- Biotechnology
- Botany / Plant Science
- Cancer / Oncology
- Cell Biology / Development
- Dentistry
- Ecology & Conservation
- Endocrinology
- Evolution
- Food Science / Nutrition
- Genetics
- Immunology
- Marine Biology
- Medical / Biomedical Physics
- Medical / Clinical Science
- Medical Imaging
- Microbiology
- Molecular Biology
- Neuroscience / Neurology
- Obstetrics, Gynaecology & Reproduction
- Palaeobiology
- Parasitology
- Pathology
- Pharmacology / Toxicology
- Pharmacy / Pharmaceutics
- Physiology & Sports Science
- Psychology & Psychiatry

Engineering

- Acoustics
- Aeronautical, Maritime and Transport Engineering
- Biomedical Engineering
- Chemical Engineering
- Civil & Structural Engineering
- Electrical & Electronic
- Energy
- Environmental Engineering
- Manufacturing
- Materials Science
- Mechanical Engineering
- Nanotechnology
- Nuclear Engineering
- Petrochemical Engineering
- Semiconductors
- Software Engineering
- Telecommunications

Maths & Computing

- Applied Mathematics
- Bioinformatics
- Computational Chemistry
- Computer Science & IT
- Data Analysis
- Information Science
- Mathematics
- Operational Research
- Software Engineering
- Statistics

Humanities

- American Studies

- Public Health & Epidemiology
- Structural Biology
- Veterinary Medicine
- Virology
- Zoology / Animal Science

Chemical Sciences

- Agricultural Chemistry
- Analytical Chemistry
- Biochemistry
- Chemical Engineering
- Chemical Toxicology
- Computational Chemistry
- Electrochemistry
- Environmental Chemistry
- Food Chemistry
- Geochemistry
- Inorganic Chemistry
- Macromolecular Chemistry
- Materials Science
- Organic Chemistry
- Pharmaceutical Chemistry
- Physical Chemistry
- Synthetic Chemistry

Physical Sciences

- Applied Physics
- Astrophysics
- Atmospheric Physics
- Atomic Physics
- Biophysics
- Condensed Matter Physics
- Fluid Dynamics
- Geophysics
- Low-temperature Physics
- Materials Science

- Anthropology
- Archaeology
- Architecture & the Built Environment
- Asian Studies
- Classics & Ancient History
- Communication, Cultural & Media Studies
- European Studies
- Geography
- History
- Middle East & African Studies
- Modern Languages & Linguistics
- Philosophy
- Theology & Religious Studies

Social Science & Health

- American Studies
- Anthropology
- Architecture & the Built Environment
- Asian Studies
- Development Studies
- Economics
- Education
- European Studies
- Gender & Sexuality
- Geography
- Health Sciences
- History
- Middle East & African Studies
- Modern Languages & Linguistics
- Nursing, Midwifery & Allied Health Professions
- Philosophy
- Political Science & International Studies
- Psychology
- Public Health & Epidemiology
- Social Work, Social Policy & Administration
- Sociology

- Medical / Biomedical Physics
- Metrology
- Nuclear Physics
- Optical Physics
- Particle Physics
- Plasma Physics
- Radiation
- Semiconductors
- Theoretical Physics

Earth Sciences

- Agronomy & Soil Science
- Atmospheric Physics
- Climatology & Climate Change
- Ecology & Conservation
- Ecotoxicology & Pollution
- Environmental Chemistry
- Environmental Engineering
- Environmental Science
- Geochemistry
- Geography
- Geology
- Geophysics
- Hydrology
- Meteorology
- Oceanography
- Palaeontology

- Sports, Recreation & Leisure Studies
- Town & Country Planning

Business & Finance

- Accounting & Finance
- Business & Management
- Economics
- Marketing
- Tourism & Hospitality

Law

- Law

Arts

- Architecture & the Built Environment
- Art & Design
- Classics & Ancient History
- Drama, Dance & Performing Arts
- English
- History
- Music