

## PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Advanced Technology
Supervisors	Principal supervisor: Dr. Shengchen Li (XJTLU) Co-supervisor: Professor Yong Yue (XJTLU) Co-supervisor: Dr. Xingyu Zhao (UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Robust acoustic signal processing methods with domain generalisation methods
Contact	Please email <a href="mailto:shengchen.li@xjtlu.edu.cn">shengchen.li@xjtlu.edu.cn</a> (XJTLU principal supervisor's email address) with a subject line of the PhD project title.  The principal supervisor's profile is linked here: <a href="https://www.xjtlu.edu.cn/en/departments/academic-departments/intelligent-science/staff/shengchen-li">https://www.xjtlu.edu.cn/en/departments/academic-departments/intelligent-science/staff/shengchen-li</a>

### **Requirements:**

The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in related fields such as Electronic Engineering and Computer Science.

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). It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. The scholarship holder is expected to carry out the major part of his or her research at XJTLU in Suzhou, China. However, he or she is eligible for a research study visit to the University of Liverpool up to six months, if this is required by the project.

**Project Description:**

Acoustic signal processing techniques help machines understand the content of environment sound. Typical acoustic signal processing tasks include audio tagging, acoustic event detection, acoustic scenes classification and automated audio captioning. The performance of acoustic signal processing system is affected by many factors such as the SNR of audio, the devices to collect audio and the location of audio. These factors all bias the acoustic features of audio hence the robustness of acoustic signal processing methods suffer. The proposed research investigates the way to improve algorithm robustness for acoustic signal processing. Given the fact that the features extracted can represent all meta data of acoustic signals, the features related to useless meta data and proposed classifications should disentangled. The process of removing the biased features can be considered as the domain generalisation process, which is pursued as the target of the proposed research.

For more information about doctoral scholarship and PhD programme at Xi'an Jiaotong-Liverpool University (XJTLU), please visit

<https://www.xjtlu.edu.cn/en/admissions/global/entry-requirements/>

<https://www.xjtlu.edu.cn/en/admissions/global/fees-and-scholarship>

**How to Apply:**

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

- CV
- Two formal reference letters
- Personal statement outlining your interest in the position
- Certificates of English language qualifications (IELTS or equivalent)
- Full academic 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)
- PDF copy of Master Degree dissertation (or an equivalent writing sample) and examiners reports available