

PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	School of AI and Advanced Computing
Supervisors	Principal supervisor: Assoc. Professor Dr Hong Seng Gan (XJTLU) Co-supervisor: Asst. Professor Dr Anh Nguyen (UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Advanced Data Fusion Learning-Driven Computer-Aided Diagnosis Model for Lung Cancer
Contact	Please email HongSeng.Gan@xjtlu.edu.cn (XJTLU principal supervisor's email address) with a subject line of the PhD project title.
	The principal supervisor's profile is linked here: https://www.xjtlu.edu.cn/en/study/departments/entrepreneur-college- taicang/college-staff/academic-staff/staff/hongseng-gan

Requirements:

The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in Computer Science/Information Technology/Computer Engineering/Electrical and Electronic Engineering

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 99,000 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:

Lung cancer is a leading cause of cancer-related deaths worldwide. Early detection of lung cancer can improve treatment outcome, but it is often challenging due to the complexity of disease. In recent years, deep learning techniques have shown promise in improving the accuracy of lung cancer diagnosis. However, previous works in this area suffered from underspecification when it is implemented in clinical setting. Our goal is to create a multimodal Fusion Learning-Driven Computer-Aided Diagnosis system for lung cancer diagnosis and treatment. Segmentation and classification task will be computed during the model development. During the computation, generalizability of model is emphasized via the use of multiple lung image datasets. At the final stage, the lesion subtype prediction outcome will be demonstrated in the perspective of generated medical report and lung nodule visual representation.

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 <u>HongSeng.Gan@xjtlu.edu.cn</u> (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