

PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	School of AI and Advanced Computing
Supervisors	<i>Please list all the names in the supervisory team. It should be consistent with the information on your approved PGRS proposal.</i> Principal supervisor: Professor Jasmine Seng Kah Phooi 成嘉佩 (XJTLU) Co-supervisor: Professor Jeremy Smith (UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Explainable AI-Empowered Graph Learning for Multimodal Analytics and its Real-world Applications
Contact	Please email Jasmine.Seng@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/departments/academic-departments/school-of-ai-and-advanced-computing/staff/jasmine-seng

Requirements:

The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in a relevant field such as computer science/engineering, electrical & electronics engineering, software engineering, or any relevant domain and be able to demonstrate equivalent relevant research experience. A person with prior knowledge and/or working experience in AI, robotics will be preferred. 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:

Recent years have seen deployments of increasingly complex artificial intelligent (AI) and machine learning techniques being implemented and deployed for many applications including robotics, e-commerce, industrial manufacturing, public health and environmental analytics. Up to today, the research on technologies/architectures for graph-based learning and analytics with explainable AI (XAI) remains an unexplored area by the global research community, and there is an urgent need to address this gap in knowledge in order that AI systems can have improved trustworthiness and have the capability to generate intelligible explanations for humans. This project has strong alignment with industry trends (e.g., social/humanoid robots) and aims to develop new AI and deep learning techniques for detecting and predicting nodes, edges and groups with anomalies in large graph data and generate intelligible explanations for humans and human-robot interactions. The research will result in the development of new innovative methods of explainable AI-empowered graph/multimodal learning with improved trustworthiness and its real-world applications in areas such as robotics, engineering, public health, cybersecurity and smart cities. The research is strongly aligned with the research priorities of AI, Internet Technologies, Robotics and Intelligent Manufacturing at Xian Jiaotong Liverpool University (XJTLU) and the research theme of Transformative AI Innovations at XJTLU's Taicang Campus. It will increase staff research and collaboration activities between School of AIAC and international collaborators at the University of Liverpool. The research outcomes will deliver software tools and crosscutting or key enabling technologies to strengthen National identified research strengths in AI and Data Analytics, especially Explainable AI (XAI) and Graph-based Intelligent Systems.

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 contact Jasmine.Seng@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