

### PhD studentship (Full-time)

|                      |                                                                                                                                                                                        |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Institution          | Xi'an Jiaotong-Liverpool University, China                                                                                                                                             |
| School               | ...School of Advanced Technology...                                                                                                                                                    |
| Supervisors          | Principal supervisor: Dr ...Jun Qi (XJTLU)<br>Co-supervisor: Dr ...Yifan Dai..(JITRI)<br>Co-supervisor: Professor...Enggee Lim...(XJTLU)<br>Co-supervisor: Dr...Alexei Lisitsa...(UoL) |
| Application Deadline | Open until the position is filled                                                                                                                                                      |
| Funding Availability | Funded PhD project                                                                                                                                                                     |
| Project Title        | ...LLM-based Automotive Cybersecurity Vulnerability Investigation...                                                                                                                   |
| Contact              | Please email ...Jun Qi..(Jun.Qi@xjtlu.edu.cn) or Yifan Dai (Daiyifan@tsinghua.edu.cn) with a subject line of the PhD project title                                                     |

#### **Requirements:**

A Master's degree with Merit and a Bachelor's degree with first-class or upper second-class honors are required for PhD admissions. Exceptional candidates holding only a Bachelor's degree may be considered on an individual basis in certain disciplines. The candidate should major in computer science, computer engineering, automotive engineering, electrical engineering, or a closely related field. The preference will be given to applicants with the expertise in cybersecurity and machine learning.

Evidence of good spoken and written English is essential. The candidate should have an IELTS (or equivalent) score of 6.5 or above, if the first language is not English. This position is open to all qualified candidates irrespective of nationality.

**Please note that the joint PhD project is industry-based and the candidate is expected to undertake part of the research at the partner organization in China.**

#### **Degree:**

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

#### **Funding:**

This PhD project is a collaborative research project between XJTLU (<http://www.xjtlu.edu.cn>) in Suzhou and JITRI (Jiangsu Industrial Technology Research Institute) ... Tsinghua University Suzhou Automotive Research Institute (TSARI) ... The student will be registered as an XJTLU PhD student but is expected to carry out the major part of his or her research at the Institute in ... TSARI ...

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). In addition, during the period of undertaking main research at institute in Suzhou, the PhD candidate will be provided with a monthly living allowance at a standard ... 5000 cny ... per month by ... TSARI ...

### **Project Description:**

This project leverages Large Language Models (LLMs) to conduct an in-depth investigation into the cybersecurity vulnerabilities inherent in ICVs. By harnessing the analytical and predictive capabilities of LLMs, the research aims to identify, categorize, and understand the multifaceted cybersecurity challenges faced by ICVs.

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>

### **Supervisor Profile:**

#### **Principal Supervisor:**

<https://www.xjtlu.edu.cn/en/departments/academic-departments/communications-and-networking/staff/wenjun-fan>

#### **JITRI co-supervisor:**

<https://www.tsari.tsinghua.edu.cn/service/jsyf/znwlyf/>

### **How to Apply:**

Interested applicants are advised to email Jun.Qi@xjtlu.edu.cn (XJTLU principal supervisor's email address) or daiyifan@tsari.tsinghua.edu.cn (JITRI supervisor's email) 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)
- PDF copy of Master Degree dissertation (or an equivalent writing sample) and examiners reports available