

**PhD studentship (Full-time)**

Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Computer Science and Software Engineering
Supervisors	Principal supervisor: Dr. Hai-Ning Liang (Xi'an Jiaotong-Liverpool University, Department of Computer Science and Software Engineering) Co-supervisor: Prof. Yong Yue (Xi'an Jiaotong-Liverpool University, Department of Computer Science and Software Engineering) Co-supervisor: TBD (University of Liverpool, Department of Computer Science)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Novel Visualization and Interaction Techniques for Multiple Targets in Virtual Reality 3D Environments 三维虚拟环境下多目标可视化与交互技术
Contact	Please email <a href="mailto:haining.liang@xjtlu.edu.cn">haining.liang@xjtlu.edu.cn</a> with a subject line of the PhD project title

**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, preferably with background in Human-Computer Interaction and Interaction Design. 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 XJTLU PhD scholarships carry out 300-500 hours of teaching assistance work per year. 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 of up to three months, if this is required by the project.

### **Project Description:**

This project investigates the development of novel visualization and selection techniques for multiple targets in virtual reality environments. Virtual, Augmented, and Mixed Reality (VMR) technologies represent the next evolution of user interfaces that can change dramatically how people interact with computing systems. VMR technologies have developed very rapidly in the last few years and will play a significant role in a variety of application domains, including training, education, gaming, tourism, and military. The rapid proliferation of VMR devices in the form of commercial head-mounted/worn display (HMD) goggles, like the Oculus RIFT and HTC Vive, calls for a need to conduct research on the fundamental aspects of user interaction with the technology to increase its usefulness and applicability in different domains. While the PhD candidate will focus on exploring visualization and selection techniques for multiple targets, he or she will be part of a team of graduate students in the Department of Computer Science and Software Engineering focusing on developing novel interfaces and interaction techniques for VMR technologies. This project provides the interested student with an opportunity to get in-depth knowledge about VMR technologies and use this knowledge to contribute to the development of new techniques that have the potential to be patented and/or have commercial value.

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

<http://www.xjtlu.edu.cn/en/admissions/phd/entry-requirements.html>

<http://www.xjtlu.edu.cn/en/admissions/phd/feesscholarships.html>

### **How to Apply:**

Interested applicants are advised to email Martijn.Tenbomer@xjtlu.edu.cn 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. Hai-Ning Liang ([HaiNing.Liang@xjtlu.edu.cn](mailto:HaiNing.Liang@xjtlu.edu.cn)), whose personal profile is linked below,

<http://www.xjtlu.edu.cn/en/departments/academic-departments/computer-science-and-software-engineering/staff/hai-liang>