#### PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department ofIndustrial Design
Supervisors	Principle supervisor:Dr. Cheng-Hung Lo (Xi'an Jiaotong-Liverpool University)Co-supervisor:Dr. Owain Pedgley (University of Liverpool, UK)Dr. Bingjian Liu (Xi'an Jiaotong-Liverpool University)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	The User Interface Design for VR-Based CAD Activities 面向计算机辅助设计交互情境之虚拟现实用户界面设计
Contact	Please email <u>ch.lo@xjtlu.edu.cn</u> (principal supervisor's email address) and copy <u>doctoralstudies@xjtlu.edu.cn</u> 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 Industrial Design or a related field such as Computer Science and a strong interest in Interaction Design. Evidence of good spoken and written English is essential. The candidate should have an IELTS score of 6.5 or above, or an equivalent qualification, 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 3500 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:

CAD applications are arguably the most prominent productivity tool used in the field of Industrial Design. However, manipulating 3D geometries with their projected views on 2D space, which is the standard practice in current applications, may not be the most intuitive solution. A VR environment, on the other hand, naturally provides an immersive and stereoscopic view for interacting with 3D objects. A user's performance on manipulating 3D objects may be benefited from the vivid perception of depth and solidity resulted from such a view. The PhD student is expected to study the interactivity in an immersive environment with regards to mainly 3D object modelling and manipulation. The student will work toward building a framework for designing the VR UIs supporting CAD-related activities. In addition to the visual aspect, the student is also encouraged to tackle the problem with a more holistic perspective such as incorporating tactile feedbacks. Besides the design insights, the student will gain trainings on running behavioural experiments and data analysis, as well as constructing VR environments with appropriate tools. This project provides the interested students an opportunity to step into the world of VR technology and develop novel, design-oriented applications based on VR.

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 <u>ch.lo@xjtlu.edu.cn</u> (principal supervisor's email address) the following documents and copy <u>doctoralstudies@xjtlu.edu.cn</u> (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 above 6.5 or equivalent is required
- 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. Cheng-Hung Lo (<u>ch.lo@xjtlu.edu.cn</u>), whose personal profile is linked below,

http://www.xjtlu.edu.cn/en/departments/academic-departments/industrialdesign/staff/cheng-hung-lo