PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Computer Science and Software Engineering
Supervisors	Principle supervisor Paul Craig (Xi'an Jiaotong-Liverpool University) Co-supervisor: Prof. Prudence Wong (University of Liverpool, UK);
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Information-Visualization Interfaces for Multi-device Co-located Synchronous Collaboration
Contact	Please email p.craig@xjtlu.edu.cn (principle 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 Computer Science. 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:

This project will investigate the use of information-visualization Interfaces to support multi-device co-located synchronous collaboration. That is, people working together using interactive graphics on different computing devices, such as large-displays, laptops, smartphones etc., working at the same time and in the same place. A typical use-case might be a group of tourists using their mobile devices and a large public display to find a hotel for a vacation in a foreign city, or a group of students using a large display and laptops to search-for and exchange information related to a group project. The technology to support this type of working is already commonplace and research indicates there are substantial benefits for users working this way. The problem is that software interfaces for this type of working are limited, and we lack a proper understanding of how to best develop these interfaces. This project looks at how this problem can be solved through the application of information visualization.

Information visualization uses interactive graphic displays to help users interpret large and complex data, and its potential to overcome mobile device limitations and support collaboration is already proven. This project will combine, adapt and further develop information visualization techniques to support multi-device co-located synchronous collaboration for a number of characteristic use cases. These will focus on collaborative data exploration, data management and data sharing (to account for the fact that user selections and data should move between devices in a multi-device multi-user system). The study will advance our understanding of computer supported collaboration and allow us to develop guidelines for the future development of this type of application.

The PhD study will involve the design, development and evaluation of prototype information visualization applications, requiring competence in computer programing (preferably in Java or a similar object oriented programming language) and a willingness to learn and adapt to new computing technologies. Informal inquires addressed to the project PI are encouraged.

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.html

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

How to Apply:

Interested applicants are advised to email......@xjtlu.edu.cn (principle 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
- 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. Paul Craig (p.craig@xjtlu.edu.cn), whose personal profile is linked below,

http://www.xjtlu.edu.cn/en/departments/academic-departments/computer-science-

and-software-engineering/staff/paul-craig