

## PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Industrial Design
Supervisors	Principle supervisor: Dr. Martijn ten Bhömer (Xi'an Jiaotong-Liverpool University, Department of Industrial Design) Co-supervisor: Dr. Hai-Ning Liang (Xi'an Jiaotong-Liverpool University, Department of Computer Science and Software Engineering) Co-supervisor: Dr. Cheng-Hung (Roger) Lo (Xi'an Jiaotong-Liverpool University, Department of Industrial Design) Co-supervisor: Dr. Benjamin Salem (University of Liverpool, School of Engineering)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Designing interactions with smart clothing for personalised care for people with cardiovascular diseases 为心血管疾病患者个人护理设计的智能服装交互设计研究
Contact	Please email <a href="mailto:Martijn.Tenbhommer@xjtlu.edu.cn">Martijn.Tenbhommer@xjtlu.edu.cn</a> and copy <a href="mailto:doctoralstudies@xjtlu.edu.cn">doctoralstudies@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 Industrial Design or a related field such as Computer Science or Textile Design with 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, 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 research project investigates how interactions with smart clothing can improve the personalised and preventive care for people with cardiovascular diseases (CVDs). Current wearable medical devices are often technological, intrusive and therefore not easily accepted. Smart clothing can incorporate smart materials and enables the clothing itself to measure physiological data while maintaining the intrinsic benefits of textiles. Personalisation plays an important role since sensors and actuators have to be positioned at a suitable location on the body. Furthermore, because of the interactive nature of smart clothing, personal interaction and services can be created for each user. The PhD student is expected to follow a research-through-design process in order to develop and test wearable smart clothing concepts which enable personalised and integrated care for cardiovascular diseases. On a more holistic level, the PhD student will generate scientific knowledge contributing to the field of Interaction Design and Human-Computer Interaction. More specifically, knowledge about how interactions with smart clothing can be designed to support personalised prevention and treatment in the context of CVDs. Besides the design insights, the student will gain training on the design of smart textile applications, supported by the appropriate tools available in the Digital Manufacturing Lab. This project provides the interested student with an opportunity to get in-depth knowledge about the world of smart textiles and develop novel, design-oriented applications based on smart textiles.

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.Tenbhomer@xjtlu.edu.cn](mailto:Martijn.Tenbhomer@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. Martijn ten Bhömer ([Martijn.Tenbhomer@xjtlu.edu.cn](mailto:Martijn.Tenbhomer@xjtlu.edu.cn)), whose personal profile is linked below,

<http://www.xjtlu.edu.cn/en/departments/academic-departments/industrial-design/staff/martijn-ten-bh-xf6-mer>