# PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Computing, School of Advanced Technology
Supervisors	Principal supervisor: Dr. Wei Wang (XJTLU, Department of Computing) Co-supervisor: Prof. Kaizhu Huang (XJTLU, Department of Intelligent Science) Co-supervisor: Prof. Frans Conen (UoL, Department of Computer Science)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Learning from natural language text with embedded knowledge bases
Contact	Please email wei.wang03@xjtlu.edu.cn (XJTLU principal supervisor's email address) with a subject line of the PhD project title.

#### Requirements:

The candidate should have a first class honours degree, or a master's degree with merit (or equivalent qualification), in Computer Science or closely related disciplines. 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:**

The quest for splendid representation is at the heart of many supervised natural language processing tasks. The deep recurrent network and bidirectional transformer based models are considered as breakthrough in recent research, especially for preprocessing textual data of large amount. However, little attention has been paid to improve the performance of supervised learning when only limited amount of labelled data is available. The key idea of the project is to leverage and exploit quality and structured human knowledge accumulated over many years in improving both representation and learning. The anticipated novelties include: (1) methods in embedding quality knowledge bases (e.g., graph embedding algorithms) in textual data analysis; in particular, how hierarchical structure of the knowledge bases can be used in enhancing multi-class and multi-label classification; and (2) methods in identifying novel classes with limited amount of labelled data based on zero-shot learning.

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

http://www.xjtlu.edu.cn/en/study-with-us/admissions/entry-requirements
http://www.xjtlu.edu.cn/en/admissions/phd/feesscholarships.html

### **How to Apply:**

Interested applicants are advised to email......@xjtlu.edu.cn (XJTLU principal supervisor's email address) 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

Informal enquiries may be addressed to Dr. Wei Wang (wei.wang03@xjtlu.edu.cn), whose personal profile is linked below, https://www.xjtlu.edu.cn/en/departments/academic-departments/computer-science-and-software-engineering/staff/wei-wang