PhD studentship   (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Mathematical Sciences, Department of EEE
Supervisors	XJTLU Principal supervisor: Rui Zhang (Xi'an Jiaotong-Liverpool University) XJTLU Co-supervisor: Kaizhu Huang (Xi'an Jiaotong-Liverpool University) UoL Co-supervisor: John Yannis Goulermas (University of Liverpool, UK);
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Study on Scalable Imbalance Learning Locally and Globally and Its Application
Contact	Please email rui.zhang02@xjtlu.edu.cn (principal supervisor's email address) or kaizhu.huang@xjtlu.edu.cn and copy doctoralstudies@xjtlu.edu.cn 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 Mathematics, Computer Science, or Engineering. Knowledge in machine learning is a plus. 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:

Learning classifiers from imbalanced data is a challenged yet important topic, arising very often in practice in machine learning. Within this context, almost all the instances are labelled as one class, while far fewer instances are labelled as the other class, usually the more important class. Traditional classifiers are not suitable to deal with imbalanced learning tasks, since they tend to classify all the data into the majority class, usually the less important class. In this research, scalable classification algorithms will be investigated for learning locally and globally from imbalanced data. Specifically, the reliable global information from the majority class and the local learning from the minority class will be exploited and engaged. Randomized algorithms will be also developed so as to significantly speed up the imbalanced learning algorithms for large-scale data. Finally, the application of the proposed imbalanced learning model will be investigated on the classification of large-scale data.

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 rui.zhang02@xjtlu.edu.cn (principal supervisor's email address) and kaizhu.huang@xjtlu.edu.cn the following documents and copy doctoralstudies@xjtlu.edu.cn (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 rui.zhang02@xjtlu.edu.cn and (kaizhu.huang@xjtlu.edu.cn), whose personal profile is linked below,
http://www.xjtlu.edu.cn/en/departments/academic-departments/mathematical-sciences/staff/rui-zhang
http://www.xjtlu.edu.cn/zh/departments/academic-departments/electrical-and-electronic-engineering/staff/kaizhu-huang