

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Intelligent Science
Supervisors	Principal supervisor: Dr. Rui Yang (XJTLU, INT) Co-supervisor: Professor Steven Guan (XJTLU, CPT) Co-supervisor: Dr. Huiqing Wen (XJTLU, EEE) Co-supervisor: Dr. Zhongbei Tian (UoL, EEE)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Data Driven Intermittent Fault Detection in Industrial Rotating Machinery 数据驱动的间歇故障检测方法研究及在工业设备中的应用
Contact	Please email: R.Yang@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 or upper second class honours degree, or a master's degree (or equivalent qualification), in Automation, Computer Science, Math, Mechatronic, Electrical Engineering or related directions.

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:

As industrial rotating machinery operates in complicated environment, intermittent faults often occur in its gearbox and bearing system with high possibility due to long operation hours or harsh environments, leaving the operation of machinery in danger. Due to the different characteristics of intermittent fault from permanent fault, such as randomness and repetitiveness, the theoretical study of intermittent fault detection is a scientific frontier. The research focus of this project is the data driven intermittent fault detection, aiming at analyzing the detectability of intermittent faults according to the characteristics and proposing data driven intermittent fault detection methods. The project will also apply the proposed methods in the industrial rotating machinery to verify the effectiveness. Therefore, this research project has not only important theoretical values, but also potential applications to improve the safety and reliability of industrial rotating machinery.

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: R.Yang@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. Rui Yang (R.Yang@xjtlu.edu.cn), whose personal profile is linked below,

<https://www.xjtlu.edu.cn/en/departments/academic-departments/intelligent-science/staff/r-yang>