PhD studentship   (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of ……Mathematical Sciences…………………..
Supervisors	Principle supervisor: Dr.Conghua Wen (XJTLU, Department) Co-supervisor: Dr Chengxiu Ling (XJTLU, Department) Co-supervisor: Dr Jinglai Li (UoL, Department)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Bayesian Methods for Stochastic Epidemic Models 贝叶斯方法在随机传染病模型中的应用
Contact	Please email Conghua.wen@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, Statistics, Computer Science or relevant 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:

This project employs Bayesian methods to build reliable stochastic models to fit partially observed data for the endemic infectious diseases and hence to assist understanding the transmission scheme of the epidemics. Under simple and complex population mixing scenarios, we will construct various feasible models and also develop efficient model selection techniques. Given the data are partially observed, we will develop an efficient reversible jump MCMC, integrate them with selection criteria to quickly implement model selection. This project demands high computations, and good knowledge in Statistics. Hence hands-on skills in programming with Matlab or C/C++ are required.

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 Conghua.wen@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)
- PDF copy of Master Degree dissertation (or an equivalent writing sample) and examiners reports available

Informal enquiries may be addressed to Dr. Conghua Wen (Conghua.wen @xjtlu.edu.cn), whose personal profile is linked below,

https://www.xjtlu.edu.cn/en/departments/academic-departments/mathematical-sciences/staff/conghua-wen