PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Advanced Technology
Supervisors	Principal supervisor: Dr Dapeng Dong (XJTLU) Co-supervisor: Dr Zhao Wang (XJTLU) Co-supervisor: Professor Leszek Antoni Gasieniec (UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Context-aware Dynamic Encoding for Efficient Big Data Processing
Contact	Please email Dapeng.Dong@xjtlu.edu.cn with a subject line of the PhD project title. The principal supervisor's profile is linked here: https://www.xjtlu.edu.cn/en/staff-details/staff/dapeng-dong

Requirements:

The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in Computer Science.

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 99,000 per annum). It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. 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 up to six months, if this is required by the project.

Project Description:

In this increasingly connected world, massive volumes of data are constantly generated from a wide variety of sources at an unprecedented speed, by which the capability of existing data management platforms are continuously challenged. In response, new parallel algorithms, computational frameworks, scalable computing platforms, and dynamic provisioning methods are developed. From another perspective, we argue that the standard information encoding schemes are no longer suitable for big data. The redundancy and convenience made for humans and legacy algorithms frequently lead to inefficient application-level communication, data processing, transmission, and storage. In this research, novel encoding/compression schemes will be explored, which allow different levels and types of encoders dynamically adjusted to the components in the processing pipeline, in consideration of the characteristics of application, hardware and data specific factors to improve the overall processing performance.

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

https://www.xjtlu.edu.cn/en/admissions/global/entry-requirements/

https://www.xjtlu.edu.cn/en/admissions/global/fees-and-scholarship

How to Apply:

Interested applicants are advised to email Dapeng.Dong@xjtlu.edu.cn the following documents for initial review and assessment (please put the project title in the subject line).

- CV
- Two formal reference letters
- Personal statement outlining your interest in the position
- Certificates of English language qualifications (IELTS or equivalent)
- Full academic 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