

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Advanced Technology
Supervisors	Principal supervisor: Professor Yong Yue (XJTLU) Co-supervisor: Dr Xiaohui Zhu (XJTLU) Co-supervisor: Professor Eng Gee Lim (XJTLU) Co-supervisor: Dr Angel Garcia-Fernandez (UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Real-time object tracking and trajectory prediction for USVs using fusion of radar and vision 基于雷达与视觉融合的无人船实时目标跟踪与轨迹预测.
Contact	Please email yong.yue@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 computer science or a closely related area. 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 six months, if this is required by the project.

Project Description:

Unmanned surface vehicles (USVs) have been widely used in maritime rescue, water environment monitoring, etc. This project will conduct novel studies for real-time object tracking and trajectory prediction, which is essential for autonomous navigation, collision avoidance of USVs and USV cluster coordination. Key problems to be tackled include 1) real-time detection and tracking for static and moving objects in complex environments with live vision; 2) real-time trajectory prediction for moving objects using radar; 3) fusion of radar and vision data to improve the accuracy for real-time of object tracking. Contemporary methods will be investigated, and new techniques will be developed with experiments to verify the work.

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 yong.yue@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 Professor Yong Yue (yong.yue@xjtlu.edu.cn), whose personal profile is linked below,

<http://www.xjtlu.edu.cn/en/departments/academic-departments/computer-science-and-software-engineering/staff/yong-yue>