PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	Center of Excellence for One Health and Environmental Sustainability, Academy of Life and Natural Sciences
Supervisors	Principal supervisor: Dr Juan Li (XJTLU) Co-supervisor: Dr Kang Dang (XJTLU) Co-supervisor: Dr Ron Mahabir (UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students); fees-only scholarship (tuition-fee waiver)
Project Title	Beyond Detection Shadows: Spatially Explicit AI for Inferring Wildlife Recovery under Observation Uncertainty
Contact	Please email Juan.Li@xjtlu.edu.cn with a subject line of the PhD project title. The principal supervisor's profile is linked here: https://scholar.xjtlu.edu.cn/en/persons/JuanLi/ Personal website: https://juanli.me

Requirements:

A Master's degree with Merit and a Bachelor's degree with first-class or upper second-class honors are required for PhD admissions. Exceptional candidates holding only a Bachelor's degree may be considered on an individual basis in certain disciplines.

Evidence of good spoken and written English is essential. The candidate should have an IELTS (or equivalent) score of 6.5 or above, if the first language is not English. This position is open to all qualified candidates irrespective of nationality.

Applicants with a background in ecology, conservation biology, environmental science, geography, statistics, computer science or a related discipline are encouraged to apply. Experience in R or Python and quantitative data analysis is desirable; familiarity with Bayesian modelling, GIS/remote sensing, machine learning or natural-language processing is an advantage. A strong interest in interdisciplinary research is essential, and the ability to read Chinese is an advantage for working with Chinese-language sources.

Degree:

The student will be awarded a PhD degree from the University of Liverpool (UK) upon successful completion of the program.

Funding:

This fees-only studentship covers tuition fees for three years, subject to satisfactory progress (currently RMB 99,000 per annum). No living stipend is included. It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. The scholarship holders are expected to conduct the majority of their research at XJTLU in Suzhou, China. However, they may apply for a short-term research visit to the University of Liverpool if the project requires it.

Project Description:

Wildlife sightings are increasing across China, but it remains unclear whether these reports reflect genuine ecological recovery or growing observation effort. This PhD project will develop bias-aware, spatially explicit AI methods to infer wildlife recovery under observation uncertainty and test these alternatives and assess conservation effectiveness at national scale. The student will use large language models to extract species, location and date information from social media and digitised historical records, with computer vision and expert review used to validate observations. These records will be integrated with camera-trap, survey and citizen-science data.

Hierarchical Bayesian occupancy models will account for imperfect detection and false positives to assess changes in the occurrence of 6–8 focal mammal species and their relationships with habitat restoration and conservation policies. A pilot analysis of wildlife-related public sentiment will explore human–wildlife coexistence. Expected outputs include a validated inference pipeline, an open-access, national-scale China Wildlife Recovery Database and evidence to inform conservation decisions.

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/doctoral/entry-requirement-phd
https://www.xjtlu.edu.cn/en/admissions/doctoral/postgraduate-research-scholarships

How to Apply:

Interested applicants are advised to email Juan.Li@xjtlu.edu.cn the following documents for initial review and assessment (please put the project title in the subject line). More about the principal supervisor's research: https://juanli.me

- 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