

## LECTURER IN AUTONOMOUS SYSTEMS

Job Ref: REQ260388

**As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.**

Successful candidates will have a record of excellence which contributes to the furtherance of knowledge in their discipline and which is recognised internationally. Candidates must also have a PhD or equivalent research experience and be able to demonstrate a clear trajectory towards achievement at a higher academic level.

### Job Description

**Please note that this is a generic job description for the position of Lecturer.**

### Lecturer in Autonomous Systems

We are seeking to appoint an outstanding Lecturer in Autonomous Systems to join the Department of Aeronautical and Automotive Engineering. The post is closely linked to the Loughborough University Centre for Autonomous Systems (LUCAS), which provides a strong and supportive environment for interdisciplinary research in **robotics, autonomy, control, and AI**, with excellent opportunities for collaboration, doctoral supervision and engagement with external partners.

We welcome applications from candidates with an excellent track record in robotics and autonomous systems, particularly **on mobile, field and/or aerial robotics**. We are especially interested in applicants with contemporary expertise that complements existing strengths in LUCAS, including learning-based control, spatial AI, multimodal sensor fusion, embedded intelligence, and foundation models for autonomous systems.

The successful candidate will be expected to build an internationally recognised research programme, secure external funding, contribute to teaching in robotics and autonomous systems, and support the continued development of research and education in this strategically important area.

*Informal details can be sought from:* Prof. Cunjia Liu, [C.Liu5@lboro.ac.uk](mailto:C.Liu5@lboro.ac.uk)

### Job Grade

Research, Teaching and Enterprise Grade 7

### Job Purpose

To contribute to and enhance the research, teaching and enterprise activities of the Department and the School in support of the University Strategy, *Creating Better Futures. Together.*

### Job Duties

#### Research

- To pursue a personal research programme consistent with the research priorities of the Department and School that increases the global visibility and reputation of the University.
- To secure external research funding.
- To supervise and manage research projects.
- To publish the outcomes of research in outlets of international standing.
- To attend and contribute to major international conferences.
- To supervise postgraduate students at Masters and Doctoral levels.
- To collaborate in research initiatives with colleagues both within the University and externally.

**Teaching**

- To work with colleagues in the Department, and across the School where appropriate, to deliver an exceptional learning environment for students.
- To teach and inspire undergraduate and postgraduate students, and to conduct associated assessments.
- To provide academic and pastoral support to undergraduate and postgraduate students.
- To promote the use of a range of methods and techniques in teaching, learning and assessment.
- To engage in the evaluation and development of modules for which you have responsibility, in terms of content, delivery and assessment.
- To be responsible for the design and content of specific areas of teaching and learning within the School's undergraduate and postgraduate programmes.
- To cooperate with colleagues in the continuous review and development of the Department's taught programmes and curriculum.

**Enterprise**

- To engage with business, public and voluntary organisations through knowledge exchange activities such as student projects and placements, research collaboration, consultancy and specialist training.
- To create social, cultural and economic impact from academic, especially research, activity.
- To secure external funding in support of these activities.
- To seek opportunities for the commercialisation of research and the formation of social enterprises.

**Related Activities and Functions**

- To work effectively with relevant administrative, technical and academic staff in the Department, School and across the University.
- To carry out specific administrative roles and functions as may be reasonably required.
- To take part in and, on occasion, act as chair of one or more School committees.
- To engage in training programmes in the University (e.g. through Staff Development) which are consistent with your needs and aspirations and those of the Department and School.
- To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.
- To engage fully with the annual Performance and Development Review (PDR) process.

**Points to Note**

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed

**Special Conditions**

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equity & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equity & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Belonging and Inclusion and, where appropriate, Recruitment and Selection.

## Person Specification

Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application.

Stages of assessment are as follows:

- 1 – Application
- 2 – Test/Assessment Centre/Presentation
- 3 – Interview

### Essential Criteria

Area	Criteria	Stage
Experience	Evidence of research and/or academic activity in autonomous systems, with a strong profile in mobile, field and/or aerial robotics.	1
	Experience of working in a high quality academic research environment including experience at post-doctoral level.	1
	Evidence of authoring original research in leading robotics, autonomous systems and related venues, including high-quality journals and internationally recognised conferences.	1
	Candidates from outside of academia must be able to demonstrate the ability to make the transition to becoming a top academic	1,2,3
Skills and abilities	Ability to develop an original research programme on your own initiative and to persuade others of its importance.	2,3
	Ability to identify and develop potential social / cultural / economic impact from professional activity.	2,3
	Knowledge of research and enterprise funding opportunities in UK HE and understanding of how to secure funding.	2,3
	A clear trajectory towards achievements at a higher academic level.	1,2,3
	Excellent communication and interpersonal skills which give you the ability to engage with students, colleagues, business and other agencies on a wide variety of matters.	1,2,3
	Ability to work as part of and to lead a team.	2,3
	Excellent IT skills.	1
Training	Commitment to and evidence of continuing professional development.	1,3
Qualifications	Relevant PhD or equivalent research experience.	1
Other	Commitment to observing the University's Equal Opportunities policy at all times.	1,3

## Desirable Criteria

Area	Criteria	Stage
Experience	Experience of presenting research work at relevant international conferences, e.g., IEEE ICRA, IROS, CASE and RSS, etc.	1
	Experience of teaching and assessment at undergraduate and postgraduate level.	1,3
	Experience of successfully supervising the projects of taught and research students or company staff at equivalent levels.	1,3
	Experience of work in or in collaboration with the disciplines within the Department of Aeronautical and Automotive Engineering.	1
	Experience of developing, validating or deploying autonomous systems on real-world robotic platforms or in application domains relevant to aeronautical, automotive, off-road or field environments.	
Skills and abilities	Ability to take part in module and programme development.	3
	Knowledge of the challenges faced in UK HE.	1
Qualifications	Achieved or progressing towards appropriate professional status.	1

## Conditions of Service

The appointment will be subject to the [University's Terms and Conditions of Employment](#) relevant to the job grade for Academic and Related staff.

## Shared University Responsibilities

As a member of the Loughborough community, you are expected to:

- Take reasonable care of yourself, others and the environment, and to prevent harm by your acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Sustainability Policies & Procedures.
- Support and contribute to the University's commitment to principles of equity, diversity and inclusion (EDI) while carrying out all duties, behaving in a manner that treats others with dignity and respect and upholds every persons right to lawful freedom of expression, freedom of speech and academic freedom. Further information about EDI at Loughborough and our strategic aims is available on our website.

## Our Purpose, Vision, and Values

Our purpose, Vision and Values underpin all that we do and shape how we work together at Loughborough.

We're proud to promote our values: **Adventurous, Collaborative, Creative, Authentic** and **Responsible**. Our people bring these values to life every day, and they are central to the positive and supportive culture that makes Loughborough unique.

If you join us, you'll be encouraged to bring these values to life in your own work and contribute to the positive, supportive culture that makes Loughborough unique.

Read more about our [vision and values](#).

## Our Accreditations



We strive to create a culture that supports equity and celebrates diversity throughout the campus. The University holds a [Bronze Athena SWAN award](#) which recognises the importance of support for women at all stages of their career.



We are proud to be a [Race Equality Charter Member](#). The Charter aims to improve the representation, progression and success of all minority ethnic staff and students within higher education and address issues of racism within higher education institutions (HEIs).



We are proud to be a Disability Confident Employer and have adopted a proactive approach to employing disabled people and to creating a more diverse workforce. We ensure that our recruitment processes are inclusive and accessible. We guarantee to offer an interview to all applicants who have declared a disability, provided that the essential criteria for the role are met. We proactively anticipate and provide reasonable adjustments and support existing employees who acquire a disability or long-term condition to thrive in the workplace.



We are a real living wage employer, and our Living Wage Employer Mark shows our commitment to paying our staff according to the cost of living.



We are proud supporters of the [City of Sanctuary movement](#) and delighted to be recognised as a University of Sanctuary. This national network brings together, university staff, lecturers, academics, and students, who together work to make Higher Education institutions places of safety, solidarity and empowerment for people seeking sanctuary.

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