

SENIOR LECTURER IN AUTONOMOUS SYSTEMS

Job Ref: REQ260388

Successful candidates will have a record of excellence which is contributing 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

Senior Lecturer in Autonomous Systems

We are seeking to appoint an outstanding Senior 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, control engineering, autonomy 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 in **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

Job Family and Grade: Research, Teaching and Enterprise Grade 8

Job Purpose

To take a leading role in developing and enhancing the research, teaching and enterprise activities 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 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 the organisation of major international conferences.
- To supervise postgraduate students at Masters and Doctoral levels.
- To lead and collaborate in research initiatives with colleagues both within the University and externally.

Teaching

- To work with colleagues in the School 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 lead colleagues in the continuous review and development of the School's taught programmes and the curriculum.

Enterprise

- To lead engagement 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 impacts 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 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 of the School's 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 School.
- To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

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 outlined in the document.

Person Specification

Below you will find the general person specification for a Senior Lecturer role at Loughborough University.

Your application will be assessed based on the essential and desirable criteria listed below.

Applicants are strongly encouraged to explicitly demonstrate how they meet each essential (and desirable) criteria at the application stage. The criteria that you need to demonstrate in your application will be listed as Stage 1 in the table below.

Stages of assessment are as follows:

- 1 – Criteria measured within the Application
- 2 – Criteria measured at Test/Assessment Centre/Presentation
- 3 – Criteria measured at 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
	A record of excellence, which is contributing to the furtherance of knowledge in area of activity, and is recognised internationally in that area.	1,2,3
	Experience of working in an internationally recognised academic research environment, including significant experience at post-doctoral level.	1
	Evidence of authoring a substantial body of original research in leading robotics, autonomous systems and related venues, including high-quality journals and internationally recognised conferences.	1
	Significant experience of successfully supervising the projects of taught and research students or company staff at equivalent levels, including evidence of effective doctoral supervision to develop PhD researchers to a high standard of independence, scholarship and research delivery.	1,3
	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	Experience of presenting research work at conferences.	1
	Experience of teaching and assessment at undergraduate and postgraduate level and of curriculum development.	1,3
	Demonstrated ability to develop an original research programme on your own initiative and to persuade others of its importance orally and on paper.	2,3
	Demonstrated ability to secure research and/or enterprise funds from external / company sources as the Principal Investigator and to develop a sustainable programme of funded research	1,3
	Demonstrated ability to create social / cultural / economic impacts from professional activity.	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
Training	Commitment to and evidence of continuing professional development.	1,3
Qualifications	Relevant PhD or equivalent research experience.	1
Other	Uphold and actively contribute to the University's commitment to Equity, Diversity and Inclusion.	1,3
	Fellow of the Higher Education Academy	1

Desirable Criteria: These are skills, experience and competencies that are additional extras that may be used to narrow the pool down if we receive a high volume of applications that meet the essential criteria.

Area	Criteria	Stage
Experience	Experience of work in or in collaboration within the relevant discipline of the Department of Aeronautical and Automotive engineering.	1
	Experience of presenting research work at international conferences.	1
	Experience in commercial exploitation of products / services or formation of social enterprises.	1,3
	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.	1,3
Skills and abilities	A sound understanding of the structure of universities and issues facing the UK higher education sector, for example: <ul style="list-style-type: none"> • Research funding opportunities in UK HE. • The challenges faced in recruiting students to UK HE. 	2,3 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.

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.