



Vacancy ref: 5621

**School of Engineering
JOB DESCRIPTION**

Title:	Research Fellow
Grade:	Grade 7
Salary:	£39,560 - £46,970 per annum
Hours:	Full-time
Contract Length:	24 months
Reporting to:	Prof. Zaili Yang
Location:	Byrom Street Campus, Liverpool. Staff may be asked to work in any location within the University. Mobility between locations will be subject to the exigencies of the service.
Job Summary:	This fixed-term Research Fellow post is supported by the EPSRC-funded Maritime and Last Mile Net Zero (MaLaMi) Place Based Impact Acceleration Account. The postholder will provide dedicated research and technical capacity for scoping, proof-of-concept and appropriate validation activity, with particular focus on Engineering Net Zero, Artificial Intelligence (AI), digitalisation and data. Work may include evidence review, data analysis, modelling, simulation, optimisation, machine learning, prototype/demonstrator development, testing and evaluation, with rapid technical assessment of Level 1 projects to support fast-fail, refinement or progression decisions. Working with Professor Zaili Yang, the MaLaMi Project Manager, investigators and external partners, the postholder will coordinate assigned technical activities, maintain project-level records and contribute evidence for reviews, milestones, KPIs, impact monitoring and dissemination. Formal programme management, finance, governance, EPSRC liaison and risk-register ownership remain with the designated MaLaMi role holders. Candidates should hold a PhD, or have equivalent professional experience, in transport, logistics, engineering, operations research, data science or a relevant discipline. They should have strong quantitative research and data-analysis skills, experience of delivering research or innovation projects, and the ability to work effectively with interdisciplinary academic and non-academic partners. Experience relevant to maritime decarbonisation, sustainable logistics, AI, digitalisation, proof-of-concept development and research translation is desirable.

DUTIES:

Research

- Liaise with MaLaMi investigators, researchers, the Project Manager and external partners to define and prioritise the technical requirements of assigned activities.
- Plan and deliver assigned scoping, feasibility, proof-of-concept and appropriate validation activities to agreed objectives, timescales and reporting requirements.
- Undertake rapid Level 1 feasibility assessments and prepare evidence-based recommendations for fast-fail, refinement, continuation or progression.
- Apply appropriate quantitative and data-driven methods, including data analysis, modelling, simulation, optimisation, AI/machine learning and uncertainty/sensitivity analysis.
- Contribute to prototype, software/tool or demonstrator development, testing and evaluation, supporting progression of promising work towards TRL3-5.
- Provide flexible technical support across Engineering Net Zero, AI, digitalisation and data applications relevant to maritime and last-mile decarbonisation.
- Analyse operational, experimental, simulation and other real-world data and translate findings into clear technical conclusions and recommendations.
- Work with academic, civic and business partners to define project questions, data needs, methods, success criteria, outputs and routes to impact.
- Maintain accurate, auditable records of objectives, methods, data, activities, results, partner contributions, IP considerations and follow-up actions.
- Prepare technical reports, completion evidence, presentations, models, datasets, analytical tools, demonstrators, case studies and publications as appropriate.
- Contribute technical input to project reviews, partner meetings, knowledge-exchange activities, showcases, funding-call development and public engagement.
- Apply requirements for ethics, RRI, EDI, data management, confidentiality, IP, research security and sustainability, and escalate risks appropriately.

Leadership and management

- Coordinate the research activities and resources assigned to the post, ensuring that they are used effectively and in accordance with MaLaMi objectives, award conditions and University procedures.
- Support and coordinate contributions from researchers, students and project partners involved in assigned MaLaMi activities, where appropriate, without assuming the formal responsibilities of the MaLaMi Project Manager.

Teaching and Learning

- Where agreed with the line manager and compatible with MaLaMi delivery, contribute to project supervision or learning activities related to the postholder's specialist expertise.
- Support the development of research skills among students or early-career researchers participating in relevant MaLaMi activities, where appropriate.

Citizenship

- Contribute to a supportive working environment and develop productive working relationships with other team members.
- Attend and contribute to staff meetings.
- Contribute to wider school/university activities, e.g., open days, student welcome, graduation and clearing events.
- Act as an ambassador for the University in all interactions with current and prospective staff and students, visitors to the University, external partners, media and the general public.
- Promote the University's values of an inclusive and diverse community.

Post Specific Duties:

- Any other duties commensurate with the grade as deemed necessary by the line manager.
- A commitment to LJMU's values and regulations and Equality and Diversity Policy.
- Commitment to adhere to and promote the ethos of Respect Always as set out in the Respect Always Charter.
- Liverpool John Moores University recognises and is aware of its Social, Economic and Environmental responsibilities, the post holder is required to minimise environmental impact in the performance of the role and actively contribute to the delivery of LJMU's Environmental Policy.
- The post-holder's mandatory Health and Safety responsibilities, which have been agreed by the University's Strategic Management Team, are contained in Section 2 of the University's Safety Management Code of Practice MCP1 Organisation for the Implementation of the Health and Safety Policy.
- This post is supported by the EPSRC MaLaMi programme. Duties and work allocation will remain aligned with the funded proposal, approved project activities and associated reporting and audit requirements.

October 2026

Person Specification

The person specification describes the skills, experience, knowledge and aptitude required to perform the duties of this post effectively. The criteria order listed should not be taken to imply their relative importance. Both paid and unpaid experience may be relevant.

Essential Factors	Evidence
Minimum requirements	Evidence
PhD, or equivalent professional experience, in transport, logistics, engineering, operations research, data science or a relevant discipline.	A
Evidence of high-quality research or technical outputs in a relevant area.	A, I
Experience of delivering research, innovation, feasibility or proof-of-concept activities.	A, I
Experience of communicating findings through reports, presentations, demonstrations, case studies or publications.	A, I
Ability to apply quantitative, analytical or data-driven methods to complex problems.	A, I
Competence in programming or analytical tools such as Python, MATLAB or equivalent.	A, I
Knowledge of modelling, simulation, optimisation, machine learning or performance assessment.	A, I
Ability to analyse complex technical data and communicate clear conclusions.	A, I, P
Ability to coordinate activities, maintain accurate records and meet deadlines.	A, I
Ability to work with interdisciplinary researchers and external partners.	A, I, P
Ability to work under pressure, learn new skills and adapt to project needs.	A, I
Excellent time management and organisational skills.	A, I
Excellent interpersonal, written and verbal communication skills.	A, I
Proficiency in the English language.	A, I
Effective teamwork and ability to coordinate the work of others where required.	A, I
Self-motivated and able to work independently within agreed objectives.	A, I

Desirable Factors	Evidence
Experience in maritime decarbonisation, ports, sustainable transport, freight or last-mile logistics.	A, I
Experience of Engineering Net Zero, AI, digitalisation or data applications.	A, I
Experience of feasibility assessment, prototyping, proof-of-concept or TRL3-5 validation.	A, I
Experience with operational, experimental or commercially sensitive real-world data.	A, I
Experience translating research into practical tools, demonstrators or decision support.	A, I
Experience of EPSRC, UKRI, EU or comparable collaborative projects.	A, I
Experience of knowledge exchange with business, civic or public-sector partners.	A, I

Awareness of responsible research, ethics, data management, IP, equality and sustainability.	A, I
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A=Application Form I=Interview P=Presentation R=Reference

BENEFITS OF WORKING FOR US

Financial benefits: Competitive salaries based on a low contractual 35 hour working week.

7.1% employer pension contributions for non-academic staff enrolled in the Local Government Pension Scheme (LGPS). This is a temporary reduction from the previous rate of 17.5%, effective from April 2026, following the Fund's triennial review. The reduction reflects the Fund's current surplus and improved financial position. This does not affect your pension benefits, which are determined by LGPS scheme rules rather than the level of employer contributions.

28.68% employer contribution to pensions for teaching staff enrolled into the Teachers' Pension Scheme (TPS).

Work life balance: Excellent annual leave provision.

30 days for support staff and 35 days for staff and senior managers grade 8 and above.

8 UK bank holidays and up to 5 University closure days between Christmas and New Year.

Family friendly policies and a range of benefits to support including job-shares, flexible working hours and part-time roles where possible.

Health and wellbeing: Regular wellbeing support initiatives throughout the year.

Access to a trained counsellor via Employee Assistance Programme (EAP).

Plus a programme of activities and range of support and resources to help look after your mental and physical wellbeing.

Career Benefits: Continuous development opportunities to enhance your knowledge and meet your career ambitions, including LinkedIn Learning.

Making a difference: LJMU Climate Action - be at the forefront of initiatives to tackle climate change.

Share experiences and challenge unfair practices with our Diversity and Inclusion Staff Networks.

Opportunity to volunteer at graduation ceremonies, clearing and open days.

Discounts and other benefits: A reward and benefits platform, giving savings on day-to-day purchases across a range of retail outlets.

Interest free loans repayable across twelve monthly instalments, including loans for annual travel season tickets and cycle to work scheme.

Massively discounted gym and fitness classes at the [University Sport Building](#).

