



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Lecturer in Railway Control and Engineering

Institute for Transport Studies, Faculty of Environment



Salary: Grade 8 (£40,792 – £48,677 p.a.)

Reference: ENVTR1079

Closing date: 13 December 2018

Interviews are expected to be held on 10 January 2019

We will consider job share/flexible working arrangements

Lecturer in Railway Control and Engineering Institute for Transport Studies, University of Leeds

Are you interested in working for a global leader in transport research and education? Would you want to further your career in one of the UK's leading research intensive Universities? Do you have a background in railway signalling and train control, network simulation and optimisation modelling?

We are looking for a highly motivated and talented individual who can deliver excellent research and teaching in the field of digital railway engineering and control.

The successful applicant will contribute to the development and delivery of specialist modules in the area of railway control and engineering as well as other relevant modules, as part of the new railway engineering and operation, management and policy Masters education programmes in the University, to commence in 2019/20.

The candidate will be able to demonstrate an established track record of high-quality and innovative research activity around railway engineering, management, operation and control, and an excellent academic potential to develop modelling and decision support tools for digital railway to increase capacity, reduce delay and cost, improve sustainability, and enhance safety and reliability. The person will also join our growing multidisciplinary Institute of High Speed Rail and System Integration at the University of Leeds, with a focus on digital controls and railway signalling integration.

You will be highly motivated, enthusiastic, and have strong analytical and computational skills, with particular expertise in optimisation, control theory, network modelling/analysis, and/or simulation model development.

What does the role entail?

As a lecturer, you will take a pro-active role in conducting high-quality and innovative teaching and research, and in establishing oneself as an independent researcher. You should be capable of:

- Delivering high standards of teaching and learning, and striving for excellent student experience;
- Providing support, guidance and timely feedback to students, acting as a personal tutor, resolving issues and/or referring to specialist parties, where appropriate;



- Delivering excellent research, and maintaining a record of high quality publications of national and international standing;
- Attracting research funding individually and collaboratively to underpin high quality research activity and research programmes/projects;
- Promoting the integration of your own research area with other research interests within and, as appropriate, outside the School and Faculty;
- Providing research supervision and helping to attract students to the University;
- Undertaking research-led teaching at different levels, including assessment and examinations and contributing towards module design, review and quality assurance mechanisms.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Lecturer you will have:

- A PhD in transport, control/automation, railway engineering, civil engineering or related discipline;
- A strong background in mathematical modelling, optimisation, control theory, and/or network simulation modelling;
- Research experience in the railway context, including but not limited to the control, operation and management of the railway systems;
- A track record of research outputs, within the related discipline, in refereed publications of internationally excellent quality;
- A successful record of obtaining external research funding with the potential for obtaining further funding in the future;
- An ability to develop and deliver a range of courses in the field of railway engineering and railway signalling and control;
- An ability to contribute to and develop interdisciplinary collaborative research projects in a broad range of areas;
- A proven record of teaching in a University environment, with enthusiasm and the ability to interact with students in ways that will enhance the student experience;
- An ability to contribute to management and administrative processes and structures, including managing resources and/or staff;



- A high level of interpersonal and communication skills, and a strong ability to communicate effectively in writing and verbally with students, academic and external audiences.

You may also have:

- Experience of providing postgraduate student supervision;
- Experience of contributing to academic leadership.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Your application should include:

- a **supporting statement** highlighting how you meet the criteria for the role and how you believe your existing knowledge and experience equips you for performing the role;
- a copy of your **curriculum vitae** giving full details of qualifications and experience.

Contact information

To explore the post further or for any queries you may have, please contact:

Professor Ronghui Liu

(<http://www.its.leeds.ac.uk/people/r.liu>)

Tel: +44 (0)113 343 5338

Email: r.liu@its.leeds.ac.uk

Additional information

Find out more about the [Faculty of Environment](#) and our [Institute for Transport Studies](#).

Find out more about our [Research and associated facilities](#).



Find out more about Equality and Inclusion and Athena Swan in the [Faculty](#) and the [University](#).

Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our [Working at Leeds](#) information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at disclosure@leeds.ac.uk.

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

