UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Data Analysis and Impact Assessment of Connected Transport and Highly Automated Vehicles, Institute for Transport Studies

Salary: Grade 7 (£33,199 – £39,609 p.a.)

Reference: ENVTR1090

Closing date: 5 July 2019

Fixed term for 30 months (due to external funding)

We will consider job share/flexible working arrangements

Research Fellow in Data Analysis and Impact Assessment of Connected Transport and Highly Automated Vehicles

Institute for Transport Studies, Faculty of Environment

Are you an ambitious researcher looking for your next challenge? Do you have a background in big data analytics and evidence-based assessment of driver behaviour and acceptance of connected, cooperative and automated transport? Do you want to further your career in one of the UK's leading research intensive Universities?

The Institute for Transport Studies has been awarded the three year PAsCAL project from H2020, which aims to create the Guide2Autonomy. This is a novel framework that will improve understanding of the implications of Connected and Autonomous Vehicles on society, as well as educate their future drivers, passengers and those who will have to share the road with them.

PAsCAL will make use of an interdisciplinary mix of tools from both human and technological sciences e.g. big data analytics and deep learning. The aim is to capture the public's acceptance and attitude, analyse and assess their concerns, identify major obstacles/barriers that may hinder the social acceptance of CAVs, model and simulate realistic scenarios for the creation of best practices and validate findings in a number of real world trials.

You will work with and in support of Dr Chen's research to ensure project tasks are successfully completed. You will be working on the PAsCAL project and will support other projects as and when required.

What does the role entail?

As Research Fellow, your main duties will include:

- Working with and in support of Dr Chen's research to ensure the PAsCAL project is successfully completed. You may also be required support other projects;
- Generating and pursuing original research ideas in big data analytics, impact assessment and scaling-up;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including, where appropriate preparing proposals for funding in collaboration with colleagues;

- Evaluating methods and techniques used and results obtained by other researchers and relating such evaluations appropriately to your own work;
- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, where appropriate, including assisting with the supervision of projects in areas relevant to the project.

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 Research Fellow you will have:

- An undergraduate degree in Engineering, Computing Science, Mathematics and Statistics or a subject related to one or more of these (2.1 or above);
- Either a PhD or near completion- i.e. the initial thesis needs to have been handed in at the point of application in transport studies or a related subject, or significant work experience relevant to connected transport, autonomous vehicles, driving behaviour or a combination of these;
- A strong background in quantitative or qualitative analysis of data from various sources such as GPS devices, vehicles, apps, attitudinal surveys of user acceptance;
- Experience of GIS mapping techniques for the multi-dimensions of acceptance and citizen clusters;
- Experience in correlation analysis of driver behaviour/reaction under different traffic and environment conditions;
- Experience in design and management of database and data server for the security and protection of personal data;
- Experience with data analysis software such as SPSS, MATLAB, Excel macros;
- A track record of successful, high quality publications in top journals (e.g. Transportation Research series, big data analytics, GIS mapping);

- Excellent written and verbal communication skills including presentation skills and the ability to communicate effectively with a wide range of stakeholders;
- Proven ability to manage competing demands effectively, responsibly and without close support;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development;
- Good time management and planning skills, with the ability to meet tight deadlines and work effectively under pressure.

You may also have:

- Knowledge of GIS software tools such as ArcGIS;
- Good knowledge of deep learning, AI;
- Experience of software programming languages such as C, Basic, R or Python;
- A good understanding of transport modelling and traffic management.

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.

Contact information

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

Dr Haibo Chen, Principal Research Fellow
Tel: +44 (0)113 343 5355
Email: H.Chen@its.leeds.ac.uk

Additional information

Find out more about the Faculty

Find out more about our Institute

Find out more about our Research and associated facilities

Find out more about Athena Swan in the Faculty

A diverse workforce

The Faculty of Environment has been awarded the Athena SWAN bronze award for our work on advancing gender equality across the three schools.

Working at Leeds

You can find out more about our generous benefits package and more about what it is like to work at the University and live in the Leeds area in our Working at Leeds information.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found in our Accessibility information 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.