



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Advanced Choice Modelling and Mathematical Psychology
Institute for Transport Studies, Faculty of Environment



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

Reference: ENVTR1076

Closing date: 7 November 2018

Fixed-term until 30 June 2020

The post will start no earlier than 1 March 2019

We will consider job share / flexible working arrangements

Research Fellow in Advanced Choice Modelling and Mathematical Psychology

Institute for Transport Studies

Are you an ambitious researcher looking for your next challenge? Do you have a background in Choice Modelling? Do you want to further your career in one of the UK's leading research intensive Universities?

We are looking for a committed, highly motivated and innovative individual with strong choice modelling skills. This post you will be working in an exciting long term research project, hosted in the Institute for Transport Studies (ITS), but with cross-university collaborations through the Choice Modelling Centre (CMC). The project looks at reconciling modelled choices with real world choices, recognising the choice process in our models, considering the use of differing decision rules and the operationalisation of alternative theories of behaviour.

In particular, you will be expected to work on transferring models and ideas developed in mathematical psychology into mainstream choice modelling. You should have a strong record of working models from mathematical psychology as you will be looking at further developing these models for real world choices to account for factors such as changing choice sets and dynamic alternatives.

Additionally, you will be working on integrating other sources of information such as eye-tracking data or EEG data into accumulator models such that the processes behind decision-making can be incorporated into the model. As this is a multi-faceted research project, you will be able to contribute to individual components of the work as well as helping to shape the direction of the research according to your own interests and background.

You will be expected to take academic ownership of large parts of the programme and make a lasting contribution to the field. You will also contribute to the empirical component of the project, which makes use of an innovative survey combining social network analysis, attitudinal surveys, a life course calendar and GPS smartphone tracking.

What does the role entail?

As a Research Fellow, your main duties will include:



- Working with and in support of Prof Stephane Hess on the DECISIONS research grant to ensure the project is successfully completed;
- Generating and pursuing original research ideas in choice modelling;
- 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 research culture of the Institute, where appropriate;
- Developing and supporting a small number of masters student dissertations in areas which support the overall objectives of the post;
- Making a contribution to the Choice Modelling Centre through interactions with other choice modellers working in the University of Leeds and forging stronger links with the School of Psychology.

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 Research Fellow you will have:

- A PhD (or close to completion) in Choice Modelling;
- A strong track record of working with alternative choice models developed in mathematical psychology, applying and contrasting them to standard econometric choice models;
- A strong track record of developing and refining state-of-the-art modelling techniques and applying them to different decision contexts;
- Experience in developing advanced choice models and applying them to real world decision contexts;



- Evidence of cross-disciplinary experience, applying choice models across different fields;
- Good time management and planning skills, with the ability to meet tight deadlines and work effectively under pressure;
- A developing track record of peer-reviewed publications in international journals;
- Computer programming skills in the context of model estimation;
- Ability to meet deadlines and maintain a professional approach to all aspects of the role;
- Excellent written and verbal communication skills including presentation skills;
- 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.

You may also have:

- Teaching experience in Choice Modelling;
- Survey design experience;
- A willingness to learn about unfamiliar sectors and literatures;
- Ideas for ways in which the project could stimulate engagement with policy makers and/or the public.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information. 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:

Professor Stephane Hess, Professor of Choice Modelling / Director of the Choice Modelling Centre (CMC)

Tel: +44 (0)113 343 6611

Email: s.hess@leeds.ac.uk



Additional information

Find out more about the [Faculty of Environment](#).

Find out more about the [Institute for Transport Studies](#).

Find out more about the [Choice Modelling Centre](#).

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

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. The Athena SWAN charter and awards seek to identify, promote and share good practice in advancing equality across genders in academia. This means analysing the journey from undergraduate applications through postgraduate study right up to the recruitment and retention of professorial staff and identifying how to improve.

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 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](#).

