

Early Stage Researcher (ESR) PhD position available in Long-Term Effects of Automation Exposure on AV/VRU Interactions, as part of a new Marie Skłodowska Curie Project at the Institute for Transport Studies



Salary: In line with the Marie Skłodowska Curie ITN requirements

Reference: ENVTR1114

Closing date: 15 December 2019

Fixed term for 3 years

Early Stage Researcher (ESR), PhD position available as part of the European Project "SHAPE-IT: Supporting the interaction of Humans and Automated vehicles: Preparing for the Environment of Tomorrow"

Institute of Transport Studies, Faculty of Environment

Are you interested in understanding the human factors challenges of Automated Vehicles? Do you want to further your career and attain a PhD in one of the UK's leading research intensive Universities?

The successful applicant for this Early-stage researcher (ESR) post will be employed for a period of 36 months at the Institute for Transport Studies, Faculty of Environment, University of Leeds, United Kingdom. The position will be funded by SHAPE-IT, a European Commission Horizon 2020 program for Research and Innovation: Marie Skłodowska-Curie Action (MSCA) Innovative Training Network (ITN). The main objective of SHAPE-IT is to facilitate the safe, acceptable and, ideally, desirable integration of user-centred and transparent automated vehicles (AVs) into tomorrow's mixed urban traffic environments, using both existing and new research methods, designing advanced interfaces and control strategies.

We are looking for a candidate interested in studying Long-Term Effects of Automation Exposure on AV/VRU Interactions. Using the state of the art facilities at Leeds, including the newly established HIKER lab this project will investigate how Vulnerable Road Users' (VRUs) experience, trust, and acceptance of AVs change with long-term/repeated exposure to the vehicles, as their exposure to the AV increases in urban traffic. The work will also determine whether these effects are influenced by user characteristics such as gender, age and personality. This project is a continuation of our work currently taking place in the interACT project and will investigate how different vehicle trajectories and externally presented Human Machine Interfaces affect long term behaviour and reactions of VRUs.

You should have an MSc degree (or expect to attain one by February 2020) in psychology/behavioural sciences or an engineering discipline, with knowledge in one or more of the following fields: human factors, cognitive psychology, neuroscience, ergonomics, human machine interfaces, cognitive modelling, artificial intelligence, machine learning, statistics, automotive technology, driver assistance systems,



software engineering, computer science, control theory, transport modelling, and safety analysis.

Employment is expected to start between February and April 2020. The ESRs will be hired for three years. All ESRs will work towards the PhD degree at their host institution (Leeds), which will be assessed following successful publication of their research in international journals, relevant to their field.

Important eligibility rules for this position

There are no restrictions on the nationality, but:

- Applicants must, at the time of recruitment, not already hold a doctorate degree and must be in the first 4 years (full-time equivalent) of their research careers (measured from the date of obtaining the degree which would entitle you to embark on a PhD);
- At the time of recruitment, applicants must not have resided or carried out their main activity (work, studies, etc.) in the UK for more than 12 months in the three years immediately prior to their recruitment to the SHAPE-IT project. Compulsory national service and/or short stays such as holidays are not taken into account.

Salary

The Marie Skłodowska-Curie Early Stage Researcher salary is €54,858 per annum plus allowances in accordance with Marie Curie European regulations. The salary figure is before employer's and employee's deductions for national insurance and taxes, and will be paid in Sterling on a monthly basis using an appropriate conversion rate.

What does the role entail?

As an Early Stage Researcher, your main duties will include:

- Keeping up to date with the research area and state of the art, reading and critically analysing the latest publications related to your PhD project;
- Designing suitable empirical studies to address your research question, in cooperation with your supervision team;



- Analysing data from your emprical studies and disseminating your results both internally and externally as part of seminars;
- Preparing your findings for suitable conference and journal articles;
- Actively participating in all relevant activities organised by the network as advised by the Supervisor;
- Attending meetings as required, to discuss the project. This will involve occasional EU-wide travel;
- Ensuring good day-to-day progress of work, and maintaining good records.

What will you bring to the role?

As an Early Stage Researcher, you will have:

- A good undergraduate degree and a Masters' degree, or equivalent, or expecting one by February 2020, in a relevant subject as outlined above;
- The ability to satisfy the eligibility requirements set for an Early Stage Researcher funded by Marie Skłodowska-Curie as specified above;
- The ability to satisfy the <u>eligibility requirements</u> to enrol on a PhD degree. This includes acceptable English language requirements if English is not your first language;
- The flexibility to travel throughout the EU;
- Applicants must have excellent written and spoken English skills, as evidenced by publications/reports and conference presentations;
- Good time management and planning skills, with the ability to meet tight deadlines and work effectively under pressure;
- Proven ability to manage competing demands effectively, responsibly and without close support;
- A proven ability to work well both individually and in a team;
- Familiarity with, or keen interest in academic research on human factors of automated vehicles;
- Comfortable with studies using human participants;
- Good people skills;
- Familiarity with (or interest in) conducting human-in-the-loop simulation studies;
- Interest in understanding the impact of automated vehicles on society;
- A strong commitment to your own continuous professional development.



How to apply

Applications can be submitted for each individual ESR position at part of the SHAPE-IT project. Please provide a separate application for each position. If we identify you as particularly interesting and suitable for one of the positions you have not applied for, we may forward your contact details to the corresponding host (pending your consent to do so), but direct application is recommended. Each application should include, your CV, and a motivation letter, highlighting your relevant experience, and your motivation for applying. The letter should be tailored to the individual positions you apply for.

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> information. Applications should be submitted by **23.59** (UK time) on the advertised closing date. Please specify which project/s you are applying for.

Please note that if you are successful in your application we will also need you to register to study for a PhD at Leeds and further details will be provided about how to do this. **Previous candidates need not apply.**

Contact information

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

Professor Natasha Merat, Chair in Human Factors of Transport Systems

Tel: +44 (0)113 34 36614

Email: n.merat@its.leeds.ac.uk

Additional information

Find out more about the **Faculty of Environment**.

Find out more about our School.

Find out more about Athena Swan in the Faculty.



A diverse workforce

The Faculty of Environment has received a prestigious Athena SWAN silver award from <u>Advance HE</u>, the national body that promotes equality in the higher education sector. This award represents the combined efforts of all schools in the Faculty and shows the positive actions we have taken to ensure that our policies, processes and ethos all promote an equal and inclusive environment for work and study.

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 <u>Working at Leeds</u> information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found in our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk.</u>

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 <u>Criminal Records</u> information page.

