|  |  |
| --- | --- |
| Logo of the EPSRC, the Engineering and Physical Sciences Research Council | big_logo_new |

**Fully-funded EPSRC PhD Studentship**

Closing Date: 31st May 2017 (23:59 UK time)

Start Date: 1st October 2017

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Project Title | | | Driver Attention to the Driving Task | | | | |
|  | | | | | | | |
|  | | | *Principal Supervisor* | Professor Oliver Carsten | *School* | Institute for Transport Studies | |
| *Email* | [O.M.J.Carsten@its.leeds.ac.uk](mailto:O.M.J.Carsten@its.leeds.ac.uk) | *Phone* | +44 (0)113 34 35348 | |
|  | | | *Industrial Partner* | Jaguar Land Rover Ltd | | | |
|  | | | | | | | |
| Project Details  |  | | --- | | With the advent of a variety of infotainment systems into the vehicle cockpit, the identification of whether the human operator is paying sufficient attention to the primary task of driving is becoming a critical research question. What entertainment and information activities are compatible with safe driving? How can infotainment systems be best designed so as to minimise the risk of diverting driver attention in situations when focus on the driving task is required?  This topic area is becoming even more important with the advent of automation of the driving task. When the vehicle is operating under its own control, it is arguably safe for the human to be diverting attention away from driving and the traffic situation. But some automation designs still require supervisory control by the human and readiness to take over at short notice. Therefore some level of attention to the external road and traffic scene is still needed and infotainment systems will need to be designed in such a way as to encourage that required attention and appropriate task sharing.  The studentship will combine both analysis of real-world driving (naturalistic studies) and experimental works, with the experimental investigation being informed by the lessons learned from the real-world studies. The analysis of real-world driving will exploit the newly completed and rich database acquired by the European UDRIVE project ([www.udrive.eu/](http://www.udrive.eu/)), which provides unparalleled detail on the driving behaviour of car drivers recruited in four European countries, including continuous video of the road scene, the vehicle interior and the driver’s face. It will be possible to analyse how driver glance behaviour and attention is influenced by the road and traffic situation, driver attitudes, driver country and secondary task activity and also how it relates to the inherent risk of the situation. Comparison with previous results from the analysis of naturalistic driving data from the U.S. will be a feature.  The experimental work will build on the naturalistic analysis to investigate how the design of infotainment systems could influence driver attention and what design solutions could fulfil drivers wish to engage in secondary tasks, while at the same time supporting needed attention to the roadway. It will be conducted in the University of Leeds Driving Simulator (<http://www.uolds.leeds.ac.uk/>), one of the most advanced such facilities in the world.  The research will be jointly funded by EPSRC and Jaguar Land Rover Ltd (JLR). JLR staff will be closely involved in the supervision and there will be ample opportunity for the student to engage with JLR. | | | | | | | | |
| Entry Requirements/necessary background | | | | | | |
| Applicants should have an appropriate background in psychology and/or human factors, ideally with some experience of work on the safety-related aspects of driving. A good bachelors degree (first or upper second class or equivalent) is a requirement. A relevant masters qualification is desirable.  Further information about entry requirements can be found here: <http://www.its.leeds.ac.uk/courses/phd/apply/> | | | | |
|  | | | | | | | |
|  | | | | | | | |

**How to Apply:** Please send a CV and a short ‘statement of motivation’ to Professor Oliver Carsten ([O.M.J.Carsten@its.leeds.ac.uk](mailto:O.M.J.Carsten@its.leeds.ac.uk)). Further information will then be provided. Professor Carsten is also available for informal consultation if you would like to find out more about the project.

**Funding**

Funding is available for UK applicants and also for EU applicants who have been ordinarily resident in the UK for three years prior to the start of the studentship. Further information about eligibility and the residency requirements can be found here: <https://www.epsrc.ac.uk/skills/students/help/eligibility/>

Funding is available for 3.5 years. It will provide tuition fees (£4,250 for 2017/18) and tax-free stipend (£14,553 for 2017/18). A Research Training Support Grant is also provided.

We welcome scholarship applications from all suitably-qualified candidates, but UK black and minority ethnic (BME) researchers are currently under-represented in our Postgraduate Research community, and we would therefore particularly encourage applications from UK BME candidates. All scholarships will be awarded on the basis of merit.