LAHP AHRC Collaborative PhD Studentship

Project Title: Inclusive Design for Shared Autonomous Vehicles

Partner: Tata Motors
Academic Lead: Dr. Jiayu Wu, Royal College of Art
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Applications are invited for a LAHP/AHRC-funded Collaborative Doctoral Award at the Royal College of Art in collaboration with Tata Motors. This fully-funded studentship will commence in October 2020.

This full-time funded Ph.D. studentship will explore and advance vehicle designs to meet the requirements of disabled, elderly and potentially marginalised users of shared autonomous transport systems, and investigate how supporting these users benefits the wider user population. Studies show that the early adopters of shared autonomous vehicles are likely to be these individuals as current transportation systems are not well equipped to support their needs, particularly in rural areas. Often public transport is not inclusive enough, door to door solutions are not well developed, and low-income users are unable to afford the customised personal mobility solutions. As implementation of autonomous transport systems accelerates, there is an opportunity for autonomous vehicles to increase the accessibility of public transport and reduce costs for marginalised populations by providing journey sharing, door to door pick-up and drop-off services and advanced journey scheduling. Inclusive design methods such as co-design, empathy, design anthropology and journey mapping will be key research approaches to observe, interpret and translate people’s needs into vehicle designs. The outputs of these studies will aim to benefit all vehicle users, making autonomous vehicle designs more widely available for the target populations and better for the entire travelling public.

This collaborative project between the Intelligent Mobility Design Centre (IMDC) at the Royal College of Art (RCA) and Tata Motors Design UK, will draw on the decades of Vehicle Design and Mobility Research (especially based on the findings of our GATEway project) of the RCA and Tata Motors’s design, manufacturing and engineering insights and pragmatic support. Primary and academic supervision will be provided by Dr. Jiayu Wu, Senior Research Fellow at the IMDC, a specialist in Mobility Experience Research and Design, Mobility Services and Inclusive Design Methods in academia and industry. Industrial supervision will be provided by Martin Uhlarik, Head of Design UK of Tata Motors, supplying feedback, market knowledge, and access to his team of more than fifty design and research staff for vehicle design and
production insights. Additional supervision will be provided as necessary based on the student’s background, knowledge and skills, to help the student deliver this intensive project based practical research.

The successful candidate will be expected to work independently, defining research questions and proposing research plans for developing the research using Inclusive Design methods and identifying likely final results and their impact/potential for improving the value of design in autonomous vehicle or/and mobility system research and design. The candidate will also be responsible for organising practical activities such as workshops, seminars and other design research events aims to generate research insights in collaboration with the IMDC’s partners and the Tata UK design team. The candidate will be expected to generate design concepts and test them with a wide range of stakeholders. Knowledge/experience of vehicle/mobility design, design research and enactment workshop are core requirements.

**Studentship details:**

The AHRC-funded London Arts and Humanities Partnership (LAHP) brings together eight leading British research universities: King’s College London, London School of Economics and Political Science, Queen Mary University London, Royal Central School of Speech and Drama, Royal College of Art, Royal College of Music, School of Advanced Study and University College London.

The studentship includes a stipend at the Research Council UK Home/ EU rate (£17,009 per annum 2019/20 rates) plus tuition fees for three and half years. The awarded candidate will also be entitled to a £550 per annum stipend top-up. As a LAHP student, the successful candidate will have full access to the LAHP Doctoral Training Partnership development activities and networking opportunities, joining a cohort of about 90 students per year. Studentships can be either full or part-time.

Applicants should have a good undergraduate degree in a relevant discipline, and a Masters-level qualification or equivalent which meets AHRC requirements for research training. Applicants with relevant work/professional experience who are considering doing a PhD are also encouraged to apply.

**Closing Date: 22nd March 2020**

For more information and to apply for the studentship, please see the [LAHP website](https://www.lahepartnership.org/).