



Research Associate in Control

Ref: 1700575

Starting Salary from

£34,635 - £41,864 per annum

(incl. London Allowance of £3031 per annum)

We wish to recruit a Research Associate from 1 January 2018 or as soon as possible thereafter to join a project that is led by Jaguar Landrover Ltd and has been funded by Innovate UK. This multi-partner industry-university consortium is entitled 'Combining brake & propulsion systems into "Integrated Torque Actuators Units"'.

From a vehicle efficiency perspective, foundation brake systems exhibit a number of suboptimal characteristics:

- 1) Off-brake residual drag torque (RDT) is significant (2-5 Nm per brake parasitic loss).
- 2) Disc cooling requirements limit the opportunity to optimise wheels aerodynamically.
- 3) Component mass is significant on an overall vehicle scale.
- 4) Brake wear emissions are a predominant emission source on Electric vehicles.

The project aims to transcend these compromises by integrating electric motors with drastically down-sized friction brakes into a single synergised inboard assembly. This Research Associate will be based in the Department of Electronic and Electrical Engineering at UCL and will provide expertise to the wider project in the area of modelling and vehicle motion control.

The post is available for a period of two years in the first instance, further funding to support the post may be available.

Key Requirements

Applicants should have (or be about to submit) a PhD in the area of control engineering. Proven capability in mathematical modelling, systems analysis and simulation is required. Experience in the design of nonlinear controllers and/or observers is required.

Appointment at Grade 7 is dependent upon having been awarded a PhD, if this is not the case, initial appointment will be at Research Assistant Grade 6B (£30,316 - £31,967 per annum) with payment at Grade 7 being backdated to the date of final submission of the PhD thesis including corrections.

HOW TO APPLY

All applications should be submitted via UCL Online recruitment system at the following link:

<http://www.ucl.ac.uk/hr/jobs>

Job reference 1700575

Interested applicants are encouraged to make Informal enquiries about the post to Professor Sarah Spurgeon at s.spurgeon@ucl.ac.uk

If you experience any problems with the application process, please contact Vicky Coombes at v.coombes@ucl.ac.uk quoting reference **1700575**

UCL Taking Action for Equality