Fully Funded Doctoral Studentship

Joint with Oxbotica and the EPSRC CDT in Autonomous Intelligent Machines & Systems (AIMS)

Fully funded 4 year Doctoral Studentship

Note: This studentship is fully-funded for Home/EU students, and partially funded for International students.

Supervisor: Professor Paul Newman (Oxford) Co-supervisor (Ben Upcroft Oxbotica)

Start Date: 1st October 2020

About AIMS - Autonomous systems powered by artificial intelligence will have a transformative impact on economy, industry and society as a whole. Our mission is to train cohorts with both theoretical, practical and systems skills in autonomous systems - comprising machine learning, robotics, sensor systems and verification- and a deep understanding of the cross-disciplinary requirements of these domains. Industrial partnerships have been and will continue to be at the heart of AIMS, shaping its training and ensuring the delivery of Oxford's world-leading research in autonomous systems to a wide variety of sectors, including smart health, transport, finance, energy and extreme environments. Given the broad importance of autonomous systems, AIMS provides training on the ethical, governance, economic and societal implications of autonomous systems. For more information regarding the AIMS programme, see our web pages at: aims.robots.ox.ac.uk.

Oxbotica is about Universal Autonomy - it makes algorithms and software that lets all vehicles do more because they are autonomous. As such, we put the same autonomous vehicle software in mines, taxis, airports, ports, warehouses and mars - to name a few. This studentship will consider what is next in the journey towards ubiquitous mobile autonomy and in particular leverage machine learning, estimation and life-long learning in the use of millimetre wave radar in conjunction with machine vision and lidar sensing. The goal being to be able to work anywhere any time and any weather in a super-human way.

If you are interested in this area, please apply for a fully/partially funded scholarship within AIMS in collaboration with Oxbotica. The successful candidate will have the opportunity to address emerging problems in the areas of Oxbotica's interests.

Award Value

The studentship covers the course fees at the level set for UK/EU students plus a stipend (tax-free maintenance grant) of £15,009 p.a. for the first year, and at least this amount for a further three years.

Eligibility

This studentship is available to all applicants but the course fee is only covered at the UK/EU rate. Therefore overseas students would have to provide the difference between the UK/EU and the overseas student rates for course fees from some other source, such as a scholarship or personal funds.

Prospective candidates will be judged according to how well they meet the following criteria:

- Applicants are normally expected to be predicted or have achieved a first-class or strong upper second-class undergraduate degree with honours (or equivalent international qualifications), as a minimum, in computer science, engineering, physics, mathematics, statistics or other related disciplines. A previous master's qualification is not required.
- Excellent English written and spoken communication skills

Candidates will also need to demonstrate a broad interest in some or all of the four AIMS themes:

- robotics, vision and perception

- machine intelligence and multi-agent systems
- control and verification
- pervasive networked sensing and actuator systems

The deadline for applying is 24th January 2020. Candidates are therefore recommended to apply as soon as possible to and to inform wendy.adams@eng.ox.ac.uk when they have done so.

If you have any technical questions about the DPhil Studentship, please email wendy.adams@eng.ox.ac.uk

Please quote **AIMS-CDT-OXBOTICA** in the studentship reference box on the application form.

aims.robots.ox.ac.uk