Fully Funded Doctoral Studentship in Robotics and AI: Robot Dexterity, Tactile Intelligence and Foundation Models

Student fee status: Home

Supervisor: Prof. Shan Luo

Start Date: October 2027

The Department of Computer Science at the University of Oxford is offering **one** fully funded DPhil studentship for home students in the Robotics and AI theme under the supervision of Prof. Shan Luo, to commence next academic year (October 2027).

The successful applicant will join the Robot Perception Lab led by Prof. Shan Luo, an internationally-leading research group who study foundational aspects of robot dexterity, tactile intelligence, robot learning, robot simulations and foundation models. Our research aims to enable robots to perceive, understand and interact intelligently with the physical world. The successful candidate will have the opportunity to collaborate with other members of the team and of the department, alongside international academic and industrial collaborators.

Prof. Luo's research focuses on tactile sensing, multimodal perception and learning for robotic manipulation. We are seeking a creative and motivated candidate interested in developing robots that can learn from physical interactions and generalise across sensors, robotic embodiments and tasks. Potential research directions include:

- Tactile and multimodal foundation models: combining touch, vision and language to understand physical interactions and support generalisable robot learning.
- Dexterous manipulation: learning contact-rich skills for handling diverse objects, including deformable materials.
- Robotic simulation and world models: developing models of contact and physical interaction to support prediction, planning and transfer from simulation to real robots.

The specific research project will be developed with the successful candidate, taking account of their interests and experience. Further information is available on Prof. Shan Luo's research website.

The studentship will provide an annual stipend (at the UKRI rate) at least £21,805 per annum for 3.5 years (42 months). The studentship will also cover the costs of course tuition fees **at home level.** Research students in the Department of

Computer Science are also provided with a fund for travel to conferences and workshops (subject to approval).

Applicants must satisfy the usual requirements for studying for a doctorate at Oxford, and apply online by **Wednesday 2 December 2026** via the DPhil in Computer Science, quoting studentship reference **27-CS-SL**. Candidates are expected to have a strong computational and/or mathematical background, with undergraduate studies in Computer Science, Engineering, Physics, Mathematics or related disciplines. Candidates must also have good writing, communication and presentation skills (see the University's web pages on the DPhil in Computer Science for details).

For further information or for informal discussions about suitability, please contact Prof. Shan Luo (shan.luo@cs.ox.ac.uk). For further information about the studentship or the application process, please e-mail Computer Science Graduate Admissions.