## Fully Funded Doctoral Studentship: Probabilistic Verification of Concurrent and Distributed Systems

Student fee status: Home or Overseas

Supervisors: Professor Nobuko Yoshida and Professor David Parker

Start Date: October 2025

The Department of Computer Science at the University of Oxford is offering **one** fully funded DPhil studentship for **home or overseas** students in the Programming Languages and Verification Themes under the supervision of Professor Nobuko Yoshida and Professor David Parker to commence next academic year (October 2025).

The successful applicant will join a team spanning two internationally leading research groups who study concurrent and distributed computing, programming language semantics, verification, design and implementation. The successful candidate will have the opportunity to collaborate with other members of the <a href="Mobility Reading Group">Mobility Reading Group</a> and the <a href="Automated Verification">Automated Verification</a> theme. The two groups regularly present their work at leading conferences in concurrency, programming languages, systems, verification and AI (notably POPL, LICS, PLDI, ICSE, CAV, CONCUR, TACAS, IJCAI, AAAI and ICRA).

The scope of this PhD studentship is broad: either theoretical or practical, but it should relate to the areas of concurrent & distributed programming and probabilistic verification, where the latter may include connections to the PRISM verification toolset developed at Oxford. The student will have an opportunity to interact with collaborators of the project and with industrial collaborators, in order to apply theory to practice.

The studentship will provide an annual stipend (at the UKRI rate) at least £19,237 per annum for 3.5 years (42 months). The studentship will also cover the costs of course tuition fees **at home or oversea 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 30 April 2025** via the <u>DPhil in Computer Science</u>, quoting studentship reference **25-CS-PLV**. 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 <u>DPhil in Computer Science</u> for details).

For further information or for informal discussions about suitability, please contact Professor Nobuko Yoshida (<a href="mailto:nobuko.yoshida@cs.ox.ac.uk">nobuko.yoshida@cs.ox.ac.uk</a>) or Professor David Parker (<a href="mailto:david.parker@cs.ox.ac.uk">david.parker@cs.ox.ac.uk</a>). For further information about the studentship or the application process, please e-mail <a href="mailto:Computer Science Graduate Admissions">Computer Science Graduate Admissions</a>.