





Job Description and Selection Criteria

Post	Professor of Computer Science
Department/Faculty	Computer Science
Division	Mathematical, Physical and Life Sciences (MPLS)
College	St John's

Overview of the post

The Department of Computer Science and St John's College are delighted to offer this opportunity for an outstanding researcher of high international standing with a track record of research that has significantly influenced the field of Computer Science, and who can demonstrate the vision, leadership and enthusiasm to maintain and develop an internationally leading research programme in computer science, and to further the academic and strategic development of the Department.

You will join a world-class department with broad strengths across the spectrum of computer science from theoretical computer science to systems and applications. You should currently be leading a research programme with potential for significant continuing influence within any area of computer science and will have an established record of attracting research funding.

This post is a statutory professorship. Statutory professors have a world-leading research reputation and exercise broad academic leadership across their department and college, and more widely in their subject at national and international level. Please see https://hr.admin.ox.ac.uk/academic-posts-at-oxford for a description of the different types of academic posts at Oxford.

The professorship is available from 1 September 2025. If you would like to discuss this post, please contact the Head of Department, Professor Leslie Ann Goldberg (head-of-dept@cs.ox.ac.uk). For queries about St John's College, please contact the Provost for Academic Affairs, Professor Kate Nation (provost.academic@sjc.ox.ac.uk). All enquiries will be treated in strict confidence and will not form part of the selection decision.

Duties of the post

You will be a member of both the University and the College community. You will be part of a lively and intellectually stimulating research community which performs to the highest international levels in research and publications and will have access to the excellent research facilities which Oxford offers. You will have a role to play in the running of St John's College as a member of the Governing Body and a trustee of the College.













The main duties of the post are as follows:

For the **Department of Computer Science**:

- Provide leadership in research and teaching in Computer Science; and contribute to leadership more broadly across the Department and the University.
- Maintain an excellent publication record in international journals.
- Provide leadership, where appropriate, towards promoting and enabling the wider impact of research on society.
- Play a leading role in the strategy and development of Computer Science research and teaching at Oxford.
- Teach and supervise students taking undergraduate and master's degrees in Computer Science, and teach and supervise doctoral students in your area of research
- Deliver lectures as required by the Head of the Department of Computer Science.
- Examine undergraduate, master's, and DPhil students as required by the Head of the Department of Computer Science.
- Obtain research and/or development funding sufficient to support a research group and to contribute to the sustainability of the Department.
- Participate in departmental administration as required by the Head of the Department of Computer Science.

For St John's College:

- Serve as a member of Governing Body and a trustee of St John's College.
- Participate in the College committee system.
- Act as college adviser for graduate students in Computer Science and willingness to serve as a mentor to one or more early career fellows.
- Contribute to the research and academic culture within the College.

Selection criteria

Your application will be judged only against the criteria which are set out below. You should ensure that your application shows clearly how your skills and experience meet these criteria.

The University is committed to fairness, consistency and transparency in selection decisions. Members of electoral boards (selection committees) will be aware of the principles of equality of opportunity, fair selection and the risks of bias. There will be both female and male board members wherever possible.

If, for any reason, you have taken a career break or have had an atypical career and wish to disclose this in your application, the electoral board will take this into account, recognising that the quantity of your research may be reduced as a result.

You will demonstrate the following:

Essential criteria

- World-leading research track record in Computer Science, and excellent publication record
- Evidence of research leadership and the enthusiasm and ability to train, guide and motivate research students and junior colleagues
- Ability and willingness to contribute to the long-term development of Computer Science, to maintain interest in the subject in Oxford, and to ensure wide recognition of Oxford's contributions to the subject

Proven record of obtaining and managing research grants

- Commitment to providing effective teaching at undergraduate and postgraduate level
- Ability to communicate effectively (in writing and orally)
- A research programme that enhances and is coherent with the research profile of the Department of Computer Science
- Commitment to promoting awareness and understanding of equality, diversity and inclusion (EDI)
- Ability and willingness to serve as a trustee of St John's College and to contribute to College governance and culture

Desirable criteria

- Experience of academic administration and university management
- Experience of outreach, public communication of science, and advocacy for Computer Science

How to apply

To apply, visit https://my.corehr.com/pls/uoxrecruit/erg jobspec details form.jobspec?p id=173846, then click on the Apply Now button on the 'Job Details' page and follow the on-screen instructions to register as a new user or log-in if you have applied previously. Please refer to the "Terms of Use" in the left-hand menu bar for information about privacy and data protection. Please provide details of three referees and indicate whether the University may contact them without seeking your permission. Referees should not write directly to the University, but may be contacted at any stage in the recruitment process if the electoral board (selection committee) requests your references.

You will also be asked to upload a CV and a supporting statement. The supporting statement should explain how you meet the selection criteria for the post using examples of your skills and experience. This may include experience gained in education or employment, or during career breaks (such as time out to care for dependants).

The University and colleges welcome applications from candidates who have a disability or long-term health condition and is committed to providing long term support. The University's disability advisor can provide support to applicants with a disability, please see https://edu.admin.ox.ac.uk/disability-support for details. Please let us know if you need any adjustments to the recruitment process, including the provision of these documents in large print, audio or other formats. If we invite you for interviews, we will ask whether you require any particular arrangements at the interview. The University Access Guide gives details of physical access to university buildings https://www.accessguide.ox.ac.uk/.

Please upload all documents as PDF files with your name and the document type in the filename.

All applications must be received by 12:00 noon UK time on Monday 10 March 2025.

Please email recruitment.support@admin.ox.ac.uk should you experience difficulties using the online application system. Further help and support is available from https://hrsystems.admin.ox.ac.uk/recruitment-support. To return to the online application at any stage, please log back in and click the "My applications" button on the left hand side of the page. You will be notified of the progress of your application by automatic emails from our e-recruitment system. Please check your spam/junk mail regularly to ensure that you receive all emails.

Applications will be considered by the electoral board as soon as possible after the closing date. The electoral board is free to search for other candidates at this or any subsequent stage in its proceedings. You will be kept informed of the progress of your application at each stage, but in some cases, there may be a delay while deliberations are ongoing.

All shortlisted candidates will be interviewed and will be asked to give a research presentation to the department and a short presentation to the electoral board as part of the interview. We expect this to take place on **22 and 23 May 2025**. The composition of the electoral board will be published in the University Gazette (https://gazette.web.ox.ac.uk/) when it is finalised.

The Department of Computer Science

The Department of Computer Science is consistently recognised as the internationally leading centre of research and teaching across a broad spectrum of computer science, ranging from foundational discoveries to interdisciplinary work with significant real-world impact. We are proud of our history as one of the longest-established computer science departments in the United Kingdom, as we continue to provide first-rate undergraduate and postgraduate teaching to some of the world's brightest minds.

Our world-class research is conducted across our research themes, which span the broad spectrum of computer science, ranging from foundational discoveries to interdisciplinary work with significant real-world impact. A significant majority of our staff are active in externally sponsored research, with both government and industrial funding. Our 2021 Research Excellence Framework submission saw 81% of our research activity ranked as world-leading (4*), with the rest ranked as internationally excellent (3*). We have had 19 ERC Fellowships in the last decade (including 7 Advanced) and we have 3 Fellows of the Royal Society, 4 Turing/Turing AI Fellows, a Fellow of the Royal Academy of Engineering and a Fellow of the Institute of Electrical and Electronics Engineers.

We enjoy close links with other Oxford University departments (Mathematics, Engineering, Physics, Statistics and Life sciences) and work collaboratively with Oxford research groups and institutes (including the Oxford Internet Institute and the Oxford e-Research Centre). At present, the department has 71 academics and roughly 90 researchers housed across multiple sites within the University's South Parks Road Science Area.

The department holds over £75m of external funding of which £58m is research funding. Research in the department is currently managed in ten themes:

- Algorithms and Complexity Theory, led by Professor Leslie Ann Goldberg, focusses on determining the inherent difficulty of computational problems, classifying problems according to this inherent difficulty, and designing and analysing algorithms that use computational resources as efficiently as possible.
- Artificial Intelligence and Machine Learning, led by Professor Michael Wooldridge, focuses on theoretical foundations of AI, multiagent systems, deep learning, reinforcement learning, and computational linguistics.
- **Automated Verification**, led by Professor Marta Kwiatkowska, investigates theory and practice of formal verification and correct-by-construction synthesis for software and hardware systems.
- **Computational Biology and Health Informatics**, led by Professor Blanca Rodriguez, is concerned with computational approaches for biomedical research and healthcare innovation.
- **Data, Knowledge, and Action**, led by Professor Ian Horrocks, includes databases, knowledge representation and reasoning.
- **Human Centred Computing**, led by Professor Nigel Shadbolt, includes human computer interaction, social computing, and the worldwide web.
- **Programming Languages**, led by Professor Nobuko Yoshida, includes functional programming, program analysis, and programming language foundations.
- Quantum, led by Professor Jonathan Barrett, focusses on quantum computing including quantum software, causality in quantum theory, quantum cryptography and foundations of quantum computing.
- **Security**, led by Professor Ivan Martinovic, specialises in cybersecurity, protocol analysis, systems security, trusted computing, and networking.

• **Systems**, led by Professor Niki Trigoni, focusses on all aspects of systems, including especially cyber physical systems.

Our greatest asset is our people. We consistently attract the best staff and students and, thanks to them, we have been ranked as the world's leading university for computer science for six years in a row by the *Times Higher Education*. We have held an Athena Swan Bronze Award since 2014, reflecting our longstanding commitment to promoting and supporting gender equality: https://www.advance-he.ac.uk/equality-charters/athena-swan-charter.

Find out more information at https://www.cs.ox.ac.uk/.

MPLS Division

The Mathematical, Physical, and Life Sciences (MPLS) Division is one of the four academic divisions of the University. Oxford is widely recognised as one of the world's leading science universities and the MPLS Division is home to non-medical sciences, with 9 academic departments that span the full spectrum of the mathematical, computational, physical, engineering and life sciences, undertaking both fundamental research and cutting-edge applied work. The departments that form MPLS collaborate closely with colleagues in Oxford across the medical sciences, social sciences and humanities, as well as with other universities, research organisations and industrial partners across the globe in pursuit of innovative research geared to address critical and fundamental scientific questions.

Every professor who is employed by the University, unless individually exempted, has an obligation to accept headship of the department or faculty in which their post is held, if invited to do so by the divisional board.

For more information please visit: https://www.mpls.ox.ac.uk/

St John's College

There are 39 self-governing and independent colleges at Oxford, giving both academic staff and students the benefits of belonging to a small, interdisciplinary community as well as to a large, internationally renowned institution. The collegiate system fosters a strong sense of community, bringing together leading academics and students across subjects, and from different cultures and countries.

Established in 1555 as a constituent college of the University of Oxford, St John's College fosters excellence in education and research and is now one of the largest among Oxford Colleges. Today, St John's is home to approximately 400 undergraduates and more than 200 graduate students. Most of the subjects on offer at Oxford University can be studied at the College, including Computer Science.

The present Fellowship of the College includes Tutorial Fellows, Professorial Fellows (this position will be a Professorial Fellow), Junior Research Fellows, and Career Development Research Fellows.

All Fellows and some other staff are members of the Senior Common Room, which nurtures an intellectual community alongside dining and social benefits. The Governing Body of the College, which has overall responsibility for all aspects of the running of the College, comprises the President (the head of the College) and more than 60 Fellows. A vibrant international community, it fosters intellectual rigour, creativity, and independence in its students, teachers, and researchers, and the College is committed to access and widening participation. The College supports a range of research activities including discussions, seminars, workshops, public lectures and visiting scholar schemes which particularly emphasize interdisciplinary approaches. While scholarly publication is naturally at the heart of our research endeavours, the fellowship is also committed to informing policy and public debate, and to teaching that is informed by research findings.

Further information about the College is available at http://www.sjc.ox.ac.uk.

About the University of Oxford

Oxford's departments and colleges aim to lead the world in research and education for the benefit of society both in the UK and globally. Oxford's researchers engage with academic, commercial and cultural partners across the world to stimulate high-quality research and enable innovation through a broad range of social, policy and economic impacts.

Oxford's self-governing community of international scholars includes Professors, Associate Professors, other college tutors, senior and junior research fellows and a large number University research staff. Research at Oxford combines disciplinary depth with an increasing focus on inter-disciplinary and multi-disciplinary activities addressing a rich and diverse range of issues. The current strategic plan can be found at http://www.ox.ac.uk/about/organisation/strategic-plan-2018-24.

Oxford's strengths lie both in empowering individuals and teams to address fundamental questions of global significance, and in providing all staff with a welcoming and inclusive workplace that supports everyone to develop and do their best work. Recognising that diversity is a great strength, and vital for innovation and creativity, Oxford aspires to build a truly inclusive community which values and respects every individual's unique contribution.

While Oxford has long traditions of scholarship, it is also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities. It consistently has the highest external research income of any university in the UK (the most recent figures are available at www.ox.ac.uk/about/organisation/finance-and-funding), and regularly creates spinout companies based on academic research generated within and owned by the University. Oxford is also recognised as a leading supporter of social enterprise.

Oxford admits undergraduate students with the intellectual potential to benefit fully from the small group learning to which Oxford is deeply committed. Meeting in small groups with their tutor, undergraduates are exposed to rigorous scholarly challenge and learn to develop their critical thinking, their ability to articulate their views with clarity, and their personal and intellectual confidence. They receive a high level of personal attention from leading academics.

Oxford has a strong postgraduate student body who are attracted to Oxford by the international standing of the faculty, by the rigorous intellectual training on offer, by the excellent research and laboratory facilities available, and by the resources of the museums and libraries, including one of the world's greatest libraries, the Bodleian.

For more information, please visit www.ox.ac.uk/about/organisation.

University Benefits, Terms and Conditions

Details of University policy in the following areas can be found at the links provided.

Salary

https://hr.admin.ox.ac.uk/academic-staff-pay

Pension

https://finance.web.ox.ac.uk/uss

Sabbatical leave

https://governance.web.ox.ac.uk/legislation/council-regulations-4-of-2004

Outside commitments

https://hr.admin.ox.ac.uk/holding-outside-appointments.

Intellectual Property

https://governance.admin.ox.ac.uk/legislation/council-regulations-7-of-2002

Managing conflicts of interest

https://researchsupport.admin.ox.ac.uk/governance/integrity

Membership of Congregation

https://www.ox.ac.uk/about/organisation/governance

https://governance.admin.ox.ac.uk/legislation/statute-iv-congregation

Family support

https://hr.admin.ox.ac.uk/family-leave-for-academic-staff.

https://childcare.admin.ox.ac.uk/home

https://www.newcomers.ox.ac.uk/

International Staff

https://welcome.ox.ac.uk/

https://staffimmigration.admin.ox.ac.uk/

Relocation

https://finance.admin.ox.ac.uk/relocation-scheme-arrangements#collapse1094916

Promoting diversity

https://edu.admin.ox.ac.uk/home

Other benefits and discounts for University employees

https://hr.admin.ox.ac.uk/discounts

Pre-employment screening

https://jobs.ox.ac.uk/pre-employment-checks.

Length of appointment

Academic posts at Oxford | HR Support

Retirement

The University operates an employer justified retirement age for academic posts of 30 September immediately preceding the 70th birthday. See https://hr.admin.ox.ac.uk/the-ejra

Data Privacy

https://compliance.admin.ox.ac.uk/job-applicant-privacy-policy.

https://compliance.admin.ox.ac.uk/data-protection-policy

College Benefits

As Professorial Fellow in Computer Science, you will be entitled to a range of College benefits including:

- an annual Supplementary duties allowance, currently £5,551 per annum (taxable and pensionable)
- full membership of the Senior Common Room with meals
- private health insurance
- a Teaching and Research allowance of up to £5,000 per annum against allowable expenses
- access to part-purchase housing scheme
- eligibility to apply for competitive research support from the College's Research Committee

The College has a purpose-built college nursery that provides places for up to 26 babies and young children of College and University staff and students. Located beside the College sports ground off Bainton Road in North Oxford, the nursery incorporates a range of state-of-the-art facilities while being homely, warm and welcoming for babies and young children up to the age of 5 years. Further information is available via the nursery's website at: http://www.baintonroadnursery.co.uk/

The College follows the University's employer justified retirement age policy for academic posts, as linked above.