



University of Oxford Department of Computer Science

## Job description and selection criteria

<b>Job title</b>	Departmental Lecturer (Databases)
<b>Division</b>	MPLS
<b>Department</b>	Computer Science
<b>Location</b>	Wolfson Building, Parks Road, Oxford.
<b>Grade and salary</b>	Grade 8: Salary £38,511 – £45,954 p.a.
<b>Hours</b>	Full Time
<b>Contract type</b>	Fixed term for up to 5 years from 1 April 2015
<b>Vacancy reference</b>	116345

### Introduction

#### The University

The University of Oxford is a complex and stimulating organisation, which enjoys an international reputation as a world-class centre of excellence in research and teaching. It employs over 10,000 staff and has a student population of over 22,000.

Most staff are directly appointed and managed by one of the University's 130 departments or other units within a highly devolved operational structure - this includes over 6,500 'academic-related' staff (postgraduate research, computing, senior library, and administrative staff) and over 2,700 'support' staff (including clerical, library, technical, and manual staff). There are also over 1,600 academic staff (professors, readers, lecturers), whose appointments are in the main overseen by a combination of broader divisional and local faculty board/departmental structures. Academics are generally all also employed by one of the 38 constituent colleges of the University as well as by the central University itself.

Our annual income in 2012/13 was £1,086.9m. Oxford is one of Europe's most innovative and entrepreneurial universities: income from external research contracts exceeds £436.8m p.a., and more than 80 spin-off companies have been created.

For more information please visit [www.ox.ac.uk/staff/about\\_the\\_university.html](http://www.ox.ac.uk/staff/about_the_university.html)

## MPLS Division

The Mathematical, Physical, and Life Sciences Division (MPLS) is one of the four academic divisions of the University.

Oxford is widely recognised as one of the world's leading science universities. In the 2008 UK Research Assessment Exercise over 70% of research activity in MPLS was judged to be world-leading (4\*) or internationally excellent (3\*), and Oxford was ranked first in the UK across the mathematical sciences as a whole.

The MPLS division's ten departments and three interdisciplinary units span the full spectrum of the mathematical, computational, physical, engineering and life sciences, and undertake both fundamental research and cutting-edge applied work. We have over 6,000 students and research staff, and generate over half of our funding from external research grants. Our research addresses major societal and technological challenges and is increasingly interdisciplinary in nature. We collaborate closely with colleagues in Oxford across the medical sciences, social sciences and humanities, as well as with researchers from around the world.

For more information, please visit:

<http://www.mpls.ox.ac.uk/>

## Department of Computer Science

The Department of Computer Science (DoCS) was established in 1957. It is one of the UK's leading Computer Science Departments (ranked first in a number of newspaper rankings, and third in terms of research power). In the RAE in 2008, 80% of the submitted research was found to be in the top two tiers, either 4\* (world-leading) or 3\* (internationally excellent). Many members of the Department are active in externally sponsored research, with both government and industrial funding. At present there are 52 members of academic staff and over 80 research staff.

DoCS has close links with government, industry, and other departments within the University. Among the latter are Mathematics, Engineering, Physics, Statistics and a number of life sciences departments. It has a major role in the rapidly-developing field of e-Science alongside the Oxford e-Research Centre, an independent unit with which we share a building. This is an essentially inter-disciplinary activity which is at present attracting major funding from a number of sources. At present DoCS holds £37m in external research contracts.

Research in DoCS is currently managed in eight themes. *Information Systems* led by Professor Ian Horrocks and including Professors Stephen Pulman (Computational Linguistics), Georg Gottlob, Mike Wooldridge, Michael Benedikt and Thomas Lukasiewicz; *Programming languages and Software Engineering* (whose leadership is currently being decided) which includes Professors Oege de Moor, Jeremy Gibbons and Jim Davies, *Computational Biology* (led by Professor David Gavaghan, and including Professors Kevin Burrage and Helen Byrne) is one of the world's leading groups building computational models of biological systems. Software Engineering, together with Computational Biology, provides the main focus of the department's work on Science. Other themes in the department are *Foundations, Logic and Structures*, (leader, Professor Samson Abramsky)

which includes groups working on quantum information and computation (Professor Abramsky and Professor Bob Coecke), game semantics and verification (Professor Luke Ong); *Algorithms* (led by Professor Elias Koutsoupias), including Professors Georg Gottlob, Leslie Anne Goldberg and Paul Goldberg, and Peter Jeavons; *Automated Verification* (leader Professor Marta Kwiatkowska) and including Professors Joel Ouaknine, Daniel Kroening, Tom Melham, James Worrell, Bill Roscoe and Gavin Lowe; and *Security* (led by Roscoe) which has been created to unite a number of existing and new academics working across this area and including a *Cybersecurity Centre* established in 2012 (under the leadership of Professor Sadie Creese) and including Lowe.

For more information please visit: <http://www.cs.ox.ac.uk/>

## Job description

### Overview of the role

The opportunity has arisen to appoint a full-time Departmental Lecturer in Computer Science (Databases). This will be a fixed-term appointment for up to five years from 1 April 2015. The salary will be on a scale up to £45,954.00 per annum. Details of the Department together with further details of the post are given in Section II. The start date of the contract will be negotiable up to early October 2015.

The postholder will be a full member of the team responsible for teaching in a variety of subjects within the Department of Computer Science. They should have a track record of research in the area of Information Systems, with a preference for research in databases.

**Main job purpose:** To engage in advanced study and primarily lecture and teach undergraduate and graduate students, and to conduct some independent research in a laboratory or workshop environment.

**Responsible for:** providing occasional guidance to casual fieldwork staff, technicians, demonstrators, and/or research students

### Responsibilities/duties

The main duties of the successful candidate are to include:

- To engage in excellent research within the broad discipline of Information Systems.
- To participate in the teaching and administrative work of the Department.
- To examine for the University when required to do so.
- To supervise, or assist in the supervision of graduate students as required.

Departmental Lecturers are expected to engage in excellent research within the broad discipline of Information Systems. They are encouraged to apply for funding to support their research activities, and to get involved in the supervision of doctoral students.

- Undertake advanced academic study to underpin lectures and class teaching
- Lecture, tutor, conduct practical classes using laboratory or workshop equipment, and supervise undergraduate and postgraduate students
- Produce lecture notes, course materials, reading lists, and reference guides
- Engage in assessment and university examining

- First contact for student matters relating to attendance, conduct, coursework, performance, and welfare (referring matters to appropriate others)
- Organise specific areas of the syllabus
- Participate in the undergraduate and graduate student admissions processes
- Gather and analyse feedback from students, colleagues, and examiners, and modify course design, content, or delivery as appropriate
- Provide ad hoc guidance to demonstrators/fieldwork assistants/technicians, or graduate students
- In support of the development of courses and as a secondary commitment alongside teaching, manage own academic research activities, conduct independent research, and generate original ideas to build on existing concepts
- Occasionally write research articles for peer-reviewed journals, book chapters, and reviews, and give poster presentations or briefings to disseminate research findings at conferences
- Liaise with examiners and academic staff regarding teaching arrangements and student performance, and with funding bodies, stakeholders, and researchers in related fields to share information and expertise
- Contribute to collaborative projects with colleagues in partner institutions and research groups

## **Selection Criteria**

Applicants should have, or be just about to complete, a doctoral degree in computer science. They should have a track record of research in the area of Information Systems with a preference for databases. They must be able to demonstrate excellence in teaching, in a sufficient variety of subjects. The post is intended as a career development position for a junior academic; the contract will not be renewable after the five years.

The selection committee will consider the extent to which each candidate meets the following selection criteria:

### **(a) Teaching**

- has the ability to teach at an excellent standard.

### **(b) Research**

- shows evidence of potential (commensurate with the candidate's career and with an appointment at Oxford University) to engage in research of an international standard of excellence in the area of Information Systems with a preference for databases. We expect the successful candidate to be submittable for the future REF exercise. Note that academics at the start of their career may get dispensation to submit less than the usual 4 outputs. Details of the REF may be found at <http://www.ref.ac.uk/>. If candidates have questions about this, we will be pleased to answer them.

### **(c) Other duties**

- demonstrates ability and willingness to participate in the full range of administrative and organisational duties in the department.

## **Working at the University of Oxford**

For further information about working at Oxford, please see:

[http://www.ox.ac.uk/about\\_the\\_university/jobs/research/](http://www.ox.ac.uk/about_the_university/jobs/research/)

## Salary and Benefits

The post, which is a full time appointment, is available for up to 5 years, has a salary on the University grade 08S scale (currently £38,511 - £45,954 p.a.). This includes membership of the University Superannuation Scheme (USS) and has an annual leave entitlement of 38 days per year (inclusive of all public holidays and university closed periods).

## How to apply

If you consider that you meet the selection criteria, click on the **Apply Now** button on the 'Job Details' page and follow the on-screen instructions to register as a user. You will then be required to complete a number of screens with your application details, relating to your skills and experience. When prompted, please provide details of two referees and indicate whether we can contact them at this stage. You will also be required to upload a CV and supporting statement. The supporting statement should describe what you have been doing over at least the last 10 years. This may have been employment, education, or you may have taken time away from these activities in order to raise a family, care for a dependant, or travel for example. Your application will be judged solely on the basis of how you demonstrate that that you meet the selection criteria outlined above and we are happy to consider evidence of transferable skills or experience which you may have gained outside the context of paid employment or education.

Please save all uploaded documents to show your name and the document type.

All applications must be received by **midday** on the closing date stated in the online advertisement.

**Candidates must also ask their referees to consider this job description and email their reference directly to [job01@cs.ox.ac.uk](mailto:job01@cs.ox.ac.uk) to arrive by the closing date**, or, alternatively, post or fax it to: The PA to the Head of Department, Department of Computer Science, Wolfson Building, Parks Road, Oxford OX1 3QD, such that the reference arrives by the advertised closing date. You will also be asked to provide reference details as part of the online application process and will be asked to indicate whether you are happy for us to contact your referees directly should they not provide a reference by the stated closing date. Should you experience any difficulties using the online application system, please email [recruitment.support@admin.ox.ac.uk](mailto:recruitment.support@admin.ox.ac.uk)

To return to the online application at any stage, please click on the following link [www.recruit.ox.ac.uk](http://www.recruit.ox.ac.uk)

Please note that you will be notified of the progress of your application by automatic e-mails from our e-recruitment system. **Please check your spam/junk mail** regularly to ensure that you receive all e-mails.

All applications will be considered by the selection committee as soon as possible after the closing date. All shortlisted candidates will be asked to give a short lecture to an audience of general computer scientists and will then be interviewed by the committee later in the day. The interview day is expected to be in w/c Monday 2 February 2015.

## Standard Terms and Conditions

1. Applications for this post will be considered by a selection committee containing representatives from the Department of Computer Science including software engineers. The selection committee is responsible for conducting all aspects of the recruitment and selection process, including making a recommendation on who should be appointed.

2. The successful candidate will be appointed on the department's scale for departmental lecturers, (£38,511-£45,954 Grade 8). Lecturers appointed below the top of this range will receive annual increments. There is also an annual 'cost-of-living' review. Departments may also, in wholly exceptional cases, propose the awarding within the substantive scale of additional increments to lecturers at any time during their appointment.

The lecturer will have the option of becoming or remaining a member of the Universities Superannuation Scheme (USS).

3. Additional remuneration is currently paid to those undertaking examining and graduate supervision.

4. All appointments are subject to the relevant provisions of the Statutes and Regulations of the University in force from time to time, as published from time to time in the University Gazette.

5. The University encourages links with industry and other outside bodies. Although the holding of outside appointments such as consultancies must be approved by the head of department, no limit as such is set on the amount of money individuals may receive in this way. The criterion is the amount of time such appointments take up: a maximum of 30 days per annum may be spent on such activities before any deduction in stipend is considered.

6. The Statutes and Regulations of the University record the extent of the University's claims to intellectual property, and the proportions in which exploitation revenues are shared with researchers. Copies of the relevant extracts are available on request.

7. All staff participate in the University's appraisal scheme which is currently under review.

8. The University has generous maternity leave arrangements. Provided that they have at least 26 weeks' service with the University at the fifteenth week before the expected week of childbirth, women may take up to 26 weeks leave on full pay, plus 13 weeks SMP, plus a further 13 weeks unpaid leave. Arrangements are available to enable a phased return to full duties; for women to return to work on a part-time basis after the birth of their child; and for paternity leave. Requests for flexible working arrangements will be considered.

9. The University has three subsidised nurseries and also subsidises places at some local nurseries, although at present there is a waiting list. In addition, staff have access to a childminding network. There is also a salary sacrifice scheme whereby parents with children at university nurseries are able to save on income tax and national insurance contributions, and a virtual voucher scheme for parents with children not at university nurseries or placed with childminders through the network whereby a saving is made on national insurance contributions. There is also a holiday play scheme for school-age children. Further information may be obtained from the childcare website ([www.admin.ox.ac.uk/eop/child](http://www.admin.ox.ac.uk/eop/child)) or by e-mailing [childcare@admin.ox.ac.uk](mailto:childcare@admin.ox.ac.uk), or writing to the Diversity and Equal Opportunities Unit, University of Oxford, University Offices, Wellington Square, Oxford OX1 2JD.

10. *Equality of opportunity:* The policy and practice of the University of Oxford require that all staff are offered equal opportunities within employment. Entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. Subject to statutory provisions, no applicant or member of staff will be treated less favourably than another because of his or her gender, marital or civil partnership status, sexual orientation, religion or belief, racial group, age or disability.

Where suitably qualified individuals are available, selection committees will contain at least one member of each sex.

11. All data supplied by applicants will be used only for the purposes of determining their suitability for the post<sup>1</sup> and will be held in accordance with the principles of the Data Protection Act 1998 and the University's Data Protection Policy.

12. The appointment will be subject to satisfactory completion of a medical questionnaire and the provision of proof of the right to work in the UK.

Applicants who would need a work visa if appointed to the post are asked to note that under the UK's new points-based migration system they will need to demonstrate that they have sufficient points, and in particular that:

(i) they have sufficient English language skills (evidenced by having passed a test in basic English, or coming from a majority English-speaking country, or having taken a degree taught in English)

*and*

(ii) that they have sufficient funds to maintain themselves and any dependants until they receive their first salary payment.

Further information is available at:  
<http://www.ukba.homeoffice.gov.uk/workingintheuk/tier2/generalarrangements/eligibility/>.

13. All reasonable interview expenses will be reimbursed. Removal expenses and travelling expenses in connection with the move to Oxford of the successful candidate are generally paid in full in appropriate cases. Professional expenses of up to £6,500 also are available where appropriate to cover solicitors' and other costs in connection with a move. Further details are available on request.

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<sup>1</sup> But NB if the appointee to the post is a migrant sponsored under the UK's new points-based migration system, we are required to retain all applications for the duration of the sponsorship.