

**UNIVERSITY OF OXFORD**

**Department of Computer Science**

**FIXED TERM DEPARTMENTAL LECTURER IN SOFTWARE ENGINEERING**

**Description of Appointment and Application Procedure**

The opportunity has arisen to appoint a full-time Departmental Lecturer in the Software Engineering Programme. This will be a fixed-term appointment for four years from 1 December 2012 or as soon as possible after that. The salary will be on a scale up to £44,166.00 per annum. Details of the Department and the Software Engineering Programme together with further details of the post are given in Section II.

The postholder will be a full member of the team responsible for the Software Engineering Programme in the Department of Computer Science.

***Duties***

The postholder will support the teaching, examining, and administration of the Programme, in core subject areas such as object-oriented programming and design, software testing, model-driven engineering, formal methods and data representation and retrieval. They will also be expected to develop their own research agenda, ideally in one of these or neighbouring subjects.

Departmental Lecturers on the Software Engineering Programme are required to teach or assist with about six (one-week) modules each year, and supervise a number of part-time MSc students. They are expected to serve as assessors and examiners as required, and to contribute to the strategic development and administration of the teaching programme. Modules are delivered at all times of the year: these duties will not be confined to university terms, and may include evening and weekend activities in Oxford and elsewhere. In fulfilling these duties, they will work under the supervision of the Director of the Programme.

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

***Selection Criteria***

Applicants should have or be just about to complete a doctoral degree in computer science or software engineering. They must be able to demonstrate excellence in teaching, in a sufficient variety of core subjects to demanding and well-informed software professionals. Previous industrial experience will be an advantage, although not necessary. The post is intended as a career development position for a junior academic; the contract will not be renewable after the four 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 within the Software Engineering Programme.

**(b) Research**

- shows evidence of potential (commensurate with the candidate's career and with an appointment at Oxford University) relevant to Software Engineering. While ideally the successful candidate will be at the level required for submission to the forthcoming REF exercise, this is not regarded as essential.

**(c) Other duties**

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

***Application Procedure***

In order to apply for this post, 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. You will also be required to submit: a full curriculum vitae; details of teaching experience, and a statement explaining how you would address teaching for a professional audience; a list of publications, and a statement of research interests; together with the names and addresses of three referees (not more than two of whom should be from the same institution). 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.

**Candidates must ask their referees to consider the further particulars and email their reference directly to [job26@cs.ox.ac.uk](mailto:job26@cs.ox.ac.uk)** or, alternatively, post or fax it to: The Administrator, Department of Computer Science, Wolfson Building, Parks Road, Oxford OX1 3QD, such that the reference arrives by, or shortly after, the advertised closing date.

Candidates who wish a referee or referees to be approached only with their specific permission and/or if they are being called for interview on the final shortlist or are in receipt of a conditional offer are asked to state such requirements explicitly alongside the details of the relevant referee(s).

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

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.

## Section II

### UNIVERSITY OF OXFORD

#### DEPARTMENTAL LECTURERSHIP IN SOFTWARE ENGINEERING

#### FURTHER DETAILS CONCERNING THE POST

##### A. *The Department*

The University of Oxford employs around 9,500 academic, research and support staff across a wide range of academic disciplines. Its mission is to achieve and sustain excellence in every area of its teaching and research, maintaining and developing its historical position as a world-class university, and enriching the international, national, and regional communities through the fruits of its research and the skills of its graduates.

The academic administration of the University is conducted through four divisions: Humanities, Social Sciences, Mathematical, Physical and Life Sciences, and Medical Sciences. The Mathematical, Physical and Life Sciences Division consists of ten constituent departments: the Department of Chemistry, the Department of Computer Science, the Department of Earth Sciences, the Department of Engineering Science, the Department of Materials, the Mathematical Institute, the Department of Physics, the Department of Plant Sciences, the Department of Statistics and Department of Zoology. The division provides a framework for interdisciplinary teaching and research, with strong links to the Medical Sciences Division.

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 interdisciplinary 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 seven themes. *Software Engineering* (led by Professor Jim Davies), works on a wide variety of areas including e-Science and model-driven development; *Programming Languages* (led by Professor Oege de Moor and including Professor Jeremy Gibbons and Dr Ralf Hinze); Security (leader Professor Bill Roscoe, with Professor Sadie Creese leading a new Cyber Security Centre, and Professor Gavin Lowe); *Verification* (leader Professor Marta Kwiatkowska) covering probabilistic and software model checking (Professor Daniel Kroening) with time and concurrency (Professor Joel Ouaknine, Professor James Worrell, and Professors Roscoe and Lowe), and automated verification of hardware (Professor Tom Melham); *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 and is particularly well known for its work on the heart; and *Foundations, Logic and Structures*, (leader, Professor Samson Abramsky) which includes groups working on quantum information and computation (Abramsky and Professor Bob Coecke), game semantics and verification (Professor Luke Ong) and

constraints (Professor Peter Jeavons); *Information Systems* (jointly led by Professors Georg Gottlob and Ian Horrocks and including Professor Stephen Pulman, who works on Computational Linguistics, and Professor Michael Benedikt). In addition the department has recently recruited Professors Mike Wooldridge (Agent Based Systems) and Elias Koutsoupias (Algorithms). A realignment of the themes is expected shortly.

## **Software Engineering Programme**

The Software Engineering Programme has been providing professional education to practising software engineers since 1993. Students come from all round the world, for stand-alone one-week courses and for matriculated masters' degrees from the University. They are developers, managers, architects, analysts, and customers, from the IT industry and from domains such as finance, public sector, defence, telecommunications, and embedded systems.

It presently offers two MSc degrees: Software Engineering and Software and Systems Security. Following a recent review the range of part-time offerings is expected to expand. The Programme presently offers about 60 courses a year, in over 30 different subjects, and has over 300 MSc students currently in flight.

## ***B. 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, (£37,012-44,166 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.

<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.