



University of Oxford Department of Computer Science

Job description and selection criteria

Job title	Research Assistant
Division	MPLS
Department	Computer Science
Location	Wolfson Building, Parks Road, Oxford.
Grade and salary	Grade 7: Salary £29,249 - £35,938 p.a.
Hours	Full Time
Contract type	Fixed Term Contract up to 1 year
Reporting to	Dr Andrew Martin

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 21,000.

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 5,900 'academic-related' staff (postgraduate research, computing, senior library, and administrative staff) and 2,820 '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 2009/10 was £879.8m. Oxford is one of Europe's most innovative and entrepreneurial universities: income from external research contracts exceeds £367m p.a., and more than 60 spin-off companies have been created.

For more information please visit www.ox.ac.uk

MPLS Division

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, Department of Computer Science, the Department of Earth Sciences, the Department of Engineering Science, the Department of Materials, Mathematical Institute, the Department of Physics, Department of Plant Sciences, Department of Zoology and Statistics. The division provides a framework for interdisciplinary teaching and research. There are also links with the Medical Sciences Division.

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

Department of Computer Science

The Department of Computer Science, University of Oxford has one of the longest-established Computer Science departments in the country. Formerly known as the Oxford University Computing Laboratory, it is home to a community of world-class research and teaching. Research activities encompass core Computer Science, as well as computational biology, quantum computing, computational linguistics, information systems, software verification and software engineering. The department is home to undergraduates, full-time and part-time Master's students, and has a strong doctoral programme.

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

Job description

Research topic	WAX
Principal Investigator / supervisor	Dr Andrew Martin
Funding partner	FP7

Applications are invited from suitably-qualified individuals for a Research Assistant post, associated with the WAX project supported by the European Commission Framework 7 programme.

Project WAX

WAX in a Nutshell: Promoting a “single service for every device” vision, WAX will move the existing baseline of web development from installed applications to services, running consistently across a wide range of connected devices, ensuring that the technologies for describing, negotiating, securing, utilizing device functionalities and adapting to context are fit for purpose.

Innovations in contextual description will be broad covering but not limited to device capabilities, network access, user identity and preferences, location, behaviourally induced properties and finally the more complex issue of the users' social network context and social media engagement.

WAX will boost the industry migration towards web-based services. WAX can back this by providing inter-operable, standardised, open source technology utilizable across domains with direct commercially exploitable value. WAX will also act as an industry catalyst to encourage collaboration and discourage fragmentation in this space. There are strong industry moves towards Internet friendly and Internet integrated offerings, and there exists a window of opportunity to place the WAX technology on a robust open foundation that will remove economic barriers to engagement, embody policy on data privacy in concrete technology and creating a centre of web centric expertise.

WAX will directly address security and privacy issues as part of Quality of Service that users of web services expect. The addressed challenges comprise: how to provision and adapt security across a range of devices, services, networks as well as how individuals can gain control over the privacy aspects of their web presence regardless of the service that is being used. Context and privacy are intimately intertwined: rich context is valuable but without user controlled privacy it becomes a liability.

Context and security are intimately intertwined: rich context is valuable but without user empowered security it becomes a liability. This dual approach is a hallmark of the WAX approach.

For further information on WAX, please visit: www.wax-project.eu.

Main Duties and Responsibilities

The post-holder will be expected to undertake original research, under the direction of Dr Andrew Martin. The research results will take the form of the preparation of reports, presentations, designs, prototype software, and academic papers, and the post-holders will need to take a central and self-organising role in this work.

Project staff will need to be willing and able to travel to project meetings in other European countries, as well as to participate in phone and video conferences.

The University is committed to participating in the WAX project from 1st September and the TLOUDS project from 1st October, so availability to begin work as soon as possible will be an advantage.

Selection Criteria

Essential:

- PhD or masters in a relevant subject
- Proven ability to work as part of a team
- Ability to express themselves clearly in writing and oral presentations
- Strong experience of software architecture design for trust and security in a distributed context
- The ability to implement prototype solutions using high-level programming languages and tools

Desirable:

Skills or experience in any or all of the following areas will also be beneficial:

- Requirements Engineering
 - elicitation, documentation, and specification of requirements
 - Experience in running focus groups, interviews, and workshops
 - Qualitative Research Methods
- Trusted Infrastructure
 - appreciation of the principles of trusted computing
 - understanding of current trends in cloud and virtualization architectures
- Secure System Design
 - architecture and design for security
 - privacy
 - usability issues in system design
- Software development
 - in a web environment
 - with security-critical APIs
- PhD or equivalent experience in a these topics
- Training and education in these topics

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/

Salary and Benefits

The post is available on a fixed term contract basis up to 31st August 2013, has a salary on the University grade 07 scale (currently £29,249 - £35,938) and includes membership of the University Superannuation Scheme (USS) and have 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 job27@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.

Should you experience any difficulties using the online application system, please email 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

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.