



University of Oxford Department of Computer Science

Job description and selection criteria

Job title	Post-doctoral 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 6 months
Reporting to	Professor Georg Gottlob

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	DIADEM: Domain-centric Intelligent Automated Data Extraction Methodology
Principal Investigator / supervisor	Professor Georg Gottlob
Funding partner	ERC

Professor Georg Gottlob from the Department of Computer Science, Oxford University has been awarded an ERC Advanced Investigators Grant to for the project "DIADEM – Domain-centric Intelligent Automated Data Extraction Methodology", that started on 1 April 2010. The aim of the DIADEM project is to provide the logical, algorithmic and methodological foundations for the knowledge-based extraction of structured data from websites belonging to *specific application domains within various industries and areas of general interest*.

In DIADEM, we investigate also extraction of data from scientific domains such as experiment data from biological experiments. In this subproject, we investigate the extraction of relevant data from large amounts of video or sensor data and the integration with experiment series data, whether extracted from web documents or provided by specific experiment series. The integration is performed with the purpose of developing statistical behavior models and the analysis of different types of randomness.

The project is directed by Professor Georg Gottlob and the project staff will part of the Information Systems Group whose faculty members are currently Prof. Michael Benedikt, Dr.

Phil Blunsom, Prof. Georg Gottlob, Prof. Ian Horrocks, Dr. Dan Olteanu, and Prof. Stephen Pulman.

In the context of this project, the Department of Computer Science has an opening for one post-doctoral research associate.

The main duties are described below. The exact scope of the research will depend on the skills of the candidate appointed who will be expected to fulfil the selection criteria defined below.

Main Duties and Responsibilities

The roles will require the postholder to undertake innovative research as defined by the project proposal and to work with colleagues to progress the objectives of the project as part of the DIADEM project team.

The duties and responsibilities are as follows:

- To provide leadership in the relevant research aspects of the project, developing research questions, generating original ideas and conducting individual research.
- To initiate publication of research results in top ranking journals and present research results at leading conferences;
- To assist with the execution of the DIADEM research plan and management of the DIADEM team.
- To support the research of junior researchers by providing technical assistance and advice on methodology, as required.
- To manage the project and group's websites, including publication, case studies, tutorial, and other material, as required.
- To assist with project reports and contribute to new research funding applications, as necessary.
- To contribute to teaching, software demos, and other activities described in the project proposal.

Selection Criteria

Essential

Applicants should have

- a doctoral degree in computer science, mathematics, or related discipline;
- strong programming skills, several years of professional experience.
- strong skills in video analysis, experience with development of robust video tracking software.
- experience with machine learning, statistical analysis of meta-information and experimental data of behavior screens;
- several years of experience handling screen and behavior data in state-of-the-art biological environments
- strong publications in areas relevant to this project;
- good communication skills in English;
- ability and willingness to mentor or supervise doctoral students.

Desirable

- proven record of organizing and processing large amounts of data.
- basic knowledge in Genetics and Neuroscience preferred
- strong interest in behavioral biology, theoretical computer science and logic

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

This post, which is a full time 6 month appointment, has a salary on the University grade 07 scale, currently £29,249 - £35,938 p.a. This includes membership of the University Superannuation Scheme (USS) and has an annual leave entitlement of 39 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 job13@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.