



UNIVERSITY OF
OXFORD

Oxford University Computing Laboratory
Project PRISMATIC: Unified Hierarchical Probabilistic
Verification Tool

One Year Grade 06S or Grade 07S Research Assistant Post
(Depending on skills/experience)

Professor Marta Kwiatkowska from the Oxford University Computing Laboratory (OUCL) has been awarded a DARPA grant for the project PRISMATIC: Unified Hierarchical Probabilistic Verification Tool. PRISMATIC is led by SIFT, a US based company, and involves Oxford and Carnegie Mellon University. The project aims to develop a workflow/process and tool to generate probabilistic “certificates of correctness” for cyber-physical systems, and will be based on probabilistic and statistical model checking, and in particular the PRISM model checker.

The Oxford PRISMATIC team will be led by Professor Kwiatkowska and Dr David Parker, and will include the researcher advertised here, and is expected to include other team members as well. The team will be members of the OUCL Verification theme. More information about the theme and the PRISM model checker can be found at:

<http://www.comlab.ox.ac.uk/research/verification/>
<http://www.prismmodelchecker.org>

The PRISMATIC project has vacancy for a one year Research Assistant available immediately. The role will require the postholder to undertake research and software development as defined by the project proposal and to work with colleagues to progress the objectives of the project as part of the PRISMATIC project team. The exact scope of the work will depend on the skills of the appointee.

Candidates will be expected to lead or contribute to publications arising from the project, present results and software demonstrations at conferences, assist with managing the project at Oxford, and participate in PRISMATIC project team meetings.

Main Duties and Responsibilities

Selection Criteria

Applicants should have (or expect shortly to obtain)

- a doctoral degree in computer science or related discipline (Grade 07S) or a Masters degree in a relevant subject (Grade 06S);
- excellent knowledge of probabilistic/statistical model checking;
- familiarity with the PRISM model checker;
- excellent programming skills;
- experience of team working and project management;
- excellent scientific writing ability;
- track record of publications relevant to this project (Grade 07S);
- good communication skills in English;
- proven ability and willingness to participate in the development of experimental software.
- strong motivation for and interest in working as a Research Assistant.

Salary and Benefits

The post, which is a full time appointment for up to one year, has a salary on the University Grade 07S scale (currently £28,983-£35,646) or Grade 06S scale (currently £25,751-£30,747 depending on qualifications and experience, and will include membership of USS as well as an annual leave entitlement of 38 days per year (inclusive of all public holidays and university closed periods).

Method of Application

Applications should be in the form of a letter of application setting out how the candidate meets the selection criteria, and supported by a full curriculum vitae, together with the names and addresses of two referees. **Candidates should state clearly whether they are applying for Grade 06S or Grade 07S position.**

These should preferably be sent by email (most formats accepted) to:

Job13@comlab.ox.ac.uk

or alternatively, posted to: The Administrator, Oxford University Computing Laboratory, Wolfson Building, Parks Road, Oxford OX1 3QD.

Applications should be sent in time to arrive by the closing date of **8th December 2010**. Applications received after this time may not be considered.

Interviews will be held on either 17th or 20th December 2010.

Candidates must also ask their referees to consider these further particulars and email their reference directly to **job13@comlab.ox.ac.uk** or, alternatively, post or fax it to the above address (fax (+44 1865 283532) such that the reference arrives by, or shortly after, the closing date.

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 age, sex, marital or civil partnership status, sexual orientation, religion or belief, racial group or disability.

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/>

All data supplied by applicants will be used only for the purposes of determining their suitability for the post and will be held in accordance with the principles of the Data Protection Act 1998 and the University's Data Protection Policy, but if the person appointed 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