UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Compilers and Computing Performance Optimisation, Faculty of Engineering & Physical Sciences



Salary: Grade 7 (£33,797 - £40,322 p.a.)

Reference: EPSCP1068

Closing date: Sunday 31 October 2021

Fixed-term for 18 Months

We will consider job share/flexible working arrangements

Research Fellow in Compilers and Computing Performance Optimisation,
School of Computing.

Are you an ambitious researcher looking for your next challenge? Do you have an established background in compilers and systems optimisation? Do you want to further your career in one of the UK's leading research-intensive Universities?

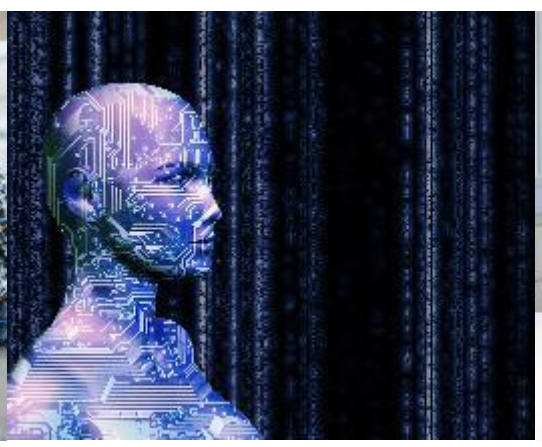
You will work on a funded project to develop the next-generation compiler technology through cutting-edge machine learning techniques. You will be highly motivated in helping to push the boundaries of knowledge and technology in machine-learning-based systems optimisation.

Holding a PhD (or have submitted your thesis before taking up the role) in Computer Science or a closely allied discipline; you will have a strong background in Computer Science, particularly in compilers or operating systems. Excellent programming skills are essential. You will join a vibrant research team investigating software optimisation techniques for emerging multi-core systems.

What does the role entail?

As a Research Fellow, your main duties will include:

- Leading the development of software infrastructures, demonstration systems and documentation according to the project objectives;
- Participating in project meetings;
- Preparing and presenting talks and reports to disseminate the results of the project;
- Collaborating with the project partner and assisting in the coordination of development activities within the project;
- Evaluating methods and techniques used and results obtained by other researchers and relating such evaluations appropriately to your own work;
- Generating and pursuing independent and original research ideas in the appropriate subject area;


- Preparing papers for publication in leading international journals and conferences and disseminating research results through other recognised forms of output;
- Contributing to setting the direction of the research project and team, including preparing proposals for funding in collaboration with colleagues;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

What will you bring to the role?

As a Research Fellow, you will have:

- A PhD (or have submitted your thesis before taking up the role) in Computer Science or a closely allied discipline;
- A strong background in systems optimisation;
- Excellent skills in low-level C/C++ programming;
- Good time management and planning skills, with the ability to meet tight deadlines and work effectively under pressure;
- A proven track record of peer-reviewed publications in high impact factor journals and conferences;
- Excellent written and verbal communication skills, including presentation skills;
- Proven ability to manage competing demands effectively, responsibly and without close support;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Experience in compiler optimisation or program tuning;
- Experience in open-sourcing software development;
- Working knowledge of machine learning;
- Experience in deep learning methods.





How to apply

You can apply for this role online; more guidance can be found on our How to Apply information page. Applications should be submitted by 23.59 (UK time) on the advertised closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

Dr Zheng Wang, Associate Professor
Tel: +44 (0)113 343 1077
Email: Z.Wang5@leeds.ac.uk

Additional information

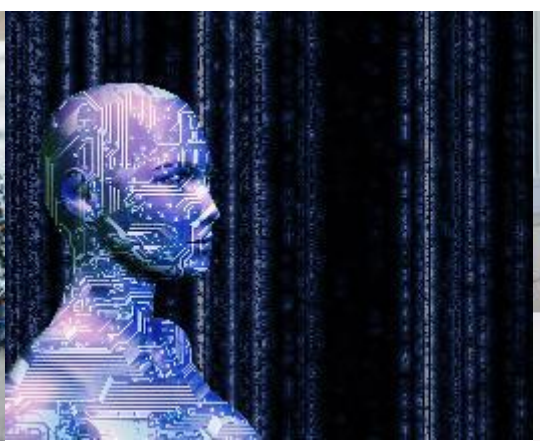
Faculty and School Information
Further information is available on the research and teaching activities of the Faculty of Engineering and Physical Sciences and the School of Computing.

A diverse workforce

The Schools in the Faculty of Engineering & Physical Sciences are proud to have been awarded the Athena SWAN Bronze or Silver Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our equality and inclusion webpage provides more information.

Working at Leeds
Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our Working at Leeds information page.

Candidates with disabilities
Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our Accessibility information page or by getting in touch with us at disclosure@leeds.ac.uk.


Please note: If you are not a British or Irish citizen, from 1 January 2021 you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen and resident in the UK before 31 December 2020, this may be your passport or status under the EU Settlement Scheme.

Criminal record information

Rehabilitation of Offenders Act 1974
A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our Criminal Records information page.



