

CANDIDATE BRIEF

Research Assistant in Structural and Algorithmic Graph Theory, Faculty of Engineering & Physical Sciences



Salary: Grade 6 (£27,511 – £32,817 p.a.) Reference: EPSCP1016 Closing date: 26 May 2020

Fixed-term until 28 February 2021 We will consider flexible working arrangements

Research Assistant in Structural and Algorithmic Graph Theory School of Computing

Are you an early career researcher looking for your next challenge? Do you have a background in graph theory? Do you want to further your career in one of the UK's leading research intensive universities?

This is an opportunity for a motivated researcher to work on the EPSRC grant EP/N019660/1 "Structure of Hereditary Graph Classes and Its Algorithmic Consequences". You will join the thriving Algorithms and Complexity Research Group at the School of Computing, University of Leeds, UK.

This project will focus on developing techniques for structural and algorithmic study of hereditary graph classes, with the aim of gaining insight into the boundaries of what is computationally feasible.

You will have an undergraduate or masters degree in Computer Science or a closely allied discipline, or equivalent research experience. You will also have research experience including, but not limited to, structural graph theory, combinatorial optimization and graph algorithms.

What does the role entail?

As a Research Assistant, your main duties will include:

- To undertake research within the resmit of the project, having input into the management of aspects of the project, coordinating work with colleagues and collaborators, and making contributions to you specific research topics as well as to the integration on the project;
- Writing reports, undertaking literature reviews and preparing papers for publication, with guidance as necessary;
- Working both independently and as part of a larger team of researchers and stakeholders;



- Supporting research activities, including contributing to research results and outputs and to the generation of independent and original ideas, ensuring a successful programme of investigation;
- Collating and analysing data to inform the direction and progression of the research project;
- Participating in the research group and presenting research output where appropriate;
- Contributing to the research culture of the School, where appropriate;
- Continually updating your knowledge, understanding and skills in the research field.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Research Assistant you will have:

- An undergraduate or masters degree in Computer Science or a closely allied discipline, or equivalent research experience;
- Research experience including, but not limited to, structural graph theory, combinatorial optimization and graph algorithms;
- Good interpersonal and communication skills, both written and verbal and the ability to communicate effectively with a wide range of stakeholders;
- Well-developed analytical skills;
- Good time management and planning skills, with the ability to meet tight deadlines;
- A proven ability to work well both individually and in a team;
- The ability to work unsupervised and to use your own initiative.

You may also have:

- A PhD (or close to completion) in a relevant discipline;
- Experience of contributing to the writing of papers for publication;
- Experience of supporting teaching at postgraduate or undergraduate level.



How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> 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:

Prof. Kristina Vušković, Leader of Algorithms and Complexity Research Theme Tel: +44 (0)113 343 5443 Email: k.vuskovic@leeds.ac.uk

Additional information

Faculty and School Information

Further information is available on the research and teaching activities of the <u>Faculty</u> of <u>Engineering & Physical Sciences</u>, and the <u>School of Computing</u>.

A diverse workforce

The Schools in the Faculty of Engineering & Physical Sciences are proud to have been awarded the Athena SWAN <u>Bronze or Silver</u> Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our <u>equality</u> 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 <u>Working at Leeds</u> information page.

Candidates with disabilities

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



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 <u>Criminal Records</u> information page.

