# Research Fellow (107737-0823)

Location University of Warwick campus, Coventry Department Computer Science Salary £33,966 - £44,263 per annum Duration 2 years

#### About the Role

The start date for this role can be negotiated for the successful candidate.

A postdoctoral Research Fellow position is available in connection with an EPSRC research grant (New Investigator Award) of Dr Dmitry Chistikov (<u>web page</u>), "Two-way automata: limitations and frontiers". The main objective of the position is to pursue cutting-edge research in automata theory, and possibly at the interface with algorithms (fine-grained complexity).

We will consider applications for employment on a part-time or other flexible working basis, even where a position is advertised as full-time, unless there are operational or other objective reasons why it is not possible to do so.

Please be aware that references will be requested for applicants shortlisted for interview. The recruiting department will be in touch to request these at this time.

#### About You

You will have a strong background in Theoretical Computer Science or a related discipline, such as Mathematics. You will have (or expect to obtain shortly) a PhD or equivalent qualification in the relevant area. Familiarity with automata (e.g., two-way automata and transducers, two-way pushdown automata, and related models of computation) is a plus but not essential: candidates with a different background are also encouraged to apply.

If you are near submission or have recently submitted your PhD but have not yet had it conferred, any offers of employment will be made as Research Assistant at the top of level 5 of the University grade structure (£32,982). Upon receipt of evidence of the successful award of your PhD, you will be promoted to Research Fellow on the first point of level 6 of the University grade structure (£33,966).

For further information regarding the skills required for this role please see the personal specification section below.

## About the Department

During your employment, you will be a member of the <u>Theory and Foundations research theme</u> in the <u>Department of Computer Science</u>, and of the Centre for Discrete Mathematics and its Applications (<u>DIMAP</u>). The Department is one of the leading Computer Science departments in the UK and was ranked 4th in the most recent national research assessment exercise (REF 2021).

We are supportive of staff with caring responsibilities including a generous maternity/paternity/adoption/parental leave policy, onsite childcare facilities and a childcare vouchers scheme.

## How to Apply

For informal enquiries, please contact Dr Dmitry Chistikov via email: d.chistikov@warwick.ac.uk .

You should provide with your application form a cover letter, a curriculum vitae (CV), and a supporting statement that outlines how you meet the selection criteria for this post. The CV should include your education history, employment history, and a list of publications, among which 2 most representative publications should be selected. The CV should also include names and contact details of 3 references.

Shortlisted candidates will be asked to arrange reference letters to arrive by 21 September 2023.

#### Closing date: 3 September 2023.

Interviews are expected to be held during the last week of September 2023.

Link to official job advertisement: https://warwick-careers.tal.net/vx/mobile-0/appcentre-ext/brand-4/candidate/so/pm/1/pl/3/opp/86-Research-Fellow-107737-0823/en-GB

#### About the University

Born in the 60s with a mindset of boldness, imagination and collaboration, the University of Warwick is a world-leading research-intensive university with the highest academic and research standards. We're one of the world's top universities, ranked 67th in the world and 10th in the UK\*, with 92% of our research assessed to be 'world leading or internationally excellent'\*\*.

You'll be joining a diverse, innovative and globally connected community committed to igniting real world progress. Here at Warwick, we offer you opportunities to follow your ambitions as long as you bring the energy and determination to succeed.

\*QS World University Rankings 2024

\*\* Research Excellence Framework 2021

To find out more about us visit our website.

#### What we offer

We will provide you with a great range of benefits, which include an attractive pension scheme, 30 days holiday plus Christmas closure, excellent learning and development opportunities, and savings on a wide range of products and services. We offer a generous maternity/paternity/adoption/parental leave policy, and onsite childcare facilities.

We recognise the importance of a healthy work/life balance and offer you access to flexible working, for more information click <u>here</u>.

We are proud to say that we are a Living Wage employer.

## **Our commitment to inclusion**

Warwick is committed to building an organisation of mutual respect and dignity, promoting a welcoming, diverse, and inclusive working and learning environment. We recognise that everyone is different in a variety of visible and non-visible ways, and that those differences are to be recognised, respected, and valued. Where possible, we go beyond legislation to provide a place where everyone can thrive, supporting all staff to achieve their full potential. We aspire to remove economic, social, and cultural barriers that may otherwise prevent people from succeeding.

We therefore welcome and encourage applications from all communities regardless of culture, background, age, disability, sex/gender, gender identity or expression, ethnicity, religion/belief, or sexual or romantic orientation. To find out more about our social inclusion work at Warwick visit our webpages <u>here</u>.

The University currently holds a <u>Race Equality Charter Bronze Award</u>, <u>Athena Swan Sliver Award</u> and a <u>Disability Smart Bronze Award</u>. The University of Warwick is also one of the six founder institutions of the <u>EUTOPIA European University Alliance</u>.

## Disclosure & Barring Service (DBS)

The University of Warwick complies with the DBS Code of Practice and undertakes not to discriminate unfairly against anyone who makes a Disclosure relating to a conviction or other information revealed. More information is available on the University's Vacancy pages and applicants may request a copy of the DBS Code of Practice.

#### Right to work in the UK

If you do not yet have the right to work in the UK and/or are seeking sponsorship for a Skilled Worker visa in the <u>UK Points-based Immigration System</u> please follow the link which contains further information about obtaining the right to work in the UK and details about eligibility for sponsorship for a Skilled Worker Visa.

## Job Description

## **JOB PURPOSE**

To undertake cutting-edge research in automata theory, and possibly at the interface of automata theory with algorithms (fine-grained complexity).

# **DUTIES AND RESPONSIBILITIES**

1. Conducting high-quality research in automata theory, and possibly at the interface of automata theory and algorithms.

2. Publishing results in leading international conferences and journals in theoretical computer science.

3. Attending and presenting research findings and papers at top conferences in theoretical computer science.

4. Assisting in the organisation of research meetings/workshops in the areas relevant to the project.

5. Contributing fully to the departmental research activities.

6. Engaging in continuous professional development.

The duties and responsibilities are not intended to be an exhaustive list but provide guidance on the main aspects of the job. You will be required to be flexible in your duties.

#### **Person Specification**

The Person Specification focuses on the knowledge, skills, experience and qualifications required to undertake the role effectively. This is measured by (a) Application Form, (b) Test/Exercise, (c) Interview, (d) Presentation.

Essential Criteria 1 Possession of a PhD or an equivalent qualification (or close to completion) in Computer Science, Mathematics, or a related discipline. (a) Essential Criteria 2 Good quality research publications. (a,c,d) Essential Criteria 3 Ability to initiate, develop, and deliver high-quality research. (a,c,d) Essential Criteria 4 Potential to publish excellent work in the relevant research area. (a,c,d) Essential Criteria 5 Effective communication skills. (a,c,d) Essential Criteria 6 Good interpersonal skills. (a,c,d) Essential Criteria 7 Ability to work independently and as part of a research team. (a,c,d)

Desirable Criteria 1
Excellent quality research publications. (a,c,d)
Desirable Criteria 2
Strong background in automata theory. (a,c,d)
Desirable Criteria 3
Prior experience of research in fine-grained complexity. (a,c,d)
Desirable Criteria 4
Prior experience of research on two-way automata or related models of computation. (a,c,d)