Job Summary

Job Title: Research Associate
Grade: 7
Salary: Grade 7 - £34,189 to £39,609 per annum. Starting salary to be £34,189 per annum.
Department: Informatics
Hours/Contract: Full time. Open-ended contract subject to fixed term funding, funding is available from 1 July 2019 to 30 June 2022.
Reference: 1074

Role Purpose

You will work as part of a team working on the EPSRC grant “Algorithms for Computing with Uncertainty: Theory and Experiments” awarded to Prof Thomas Erlebach and Dr Michael Hoffmann. The main aim of the project is to study algorithms and lower bounds for the model of explorable uncertainty where queries can be used to obtain additional information about an initially uncertain input. This includes scenarios where a number of queries can be made in parallel, scheduling problems where the queries are part of the schedule, and problems where the query cost and solution cost are combined into a single objective.

Main Duties and Responsibilities

<table>
<thead>
<tr>
<th>Main Duties and Responsibilities</th>
<th>% Time</th>
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<tr>
<td>To engage in research related to the topic of the grant:</td>
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<td>• To plan and produce independent high-quality original research.</td>
<td>50%</td>
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<td>• To write up findings for scientific publications.</td>
<td>20%</td>
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<td>• To present scientific findings at international conferences.</td>
<td>10%</td>
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<td>• To contribute to the overall activities of the research team and department as required by providing support and guidance to other staff and students.</td>
<td>10%</td>
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<td>• To engage in continuous professional development, for example through participation in relevant staff development programmes or other training events.</td>
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Internal and External Relationships

Liaison with collaborators within and outside the University of Leicester. Regular attendance at major international and national conferences to present research results and to network, contributing to personal recognition and enhancing the reputation of the University and the wider research programme. The post holder may be required to take a role in the supervision of PhD students and potentially master and undergraduate student projects.

Planning and Organising

You will be required to effectively manage your time to deliver on the priorities of the project.

Qualifications, Knowledge and Experience

Essential

• PhD, or nearing completion of PhD, in computer science or closely related field*
### Job Summary

- Proven strong track record demonstrating high-level knowledge and skills in design and analysis of algorithms, especially online algorithms, approximation algorithms, scheduling algorithms, graph algorithms, or combinatorial optimisation*
- Proven strong track record demonstrating high ability to write, present and publish research results in relevant conferences and journals*

#### Desirable
- Experience in the implementation and experimental evaluation of algorithms*
- Experience of working with students and collaborators
- Experience of undertaking collaborative research

### Skills, Abilities and Competencies

#### Essential
- High level of proficiency in English, sufficient to undertake research, teaching and administrative activities utilising English Language materials and to communicate effectively with staff and students
- Good written communication skills
- Good verbal communication skills
- Ability to work independently and also as part of a research team
- Ability to observe research ethics
- Highly trustworthy with a strong work ethic
- Ability to work under time pressure to meet tight deadlines and to organize own time

#### Desirable
- Ability to make public presentation of results

*Criteria to be used in shortlisting candidates for interview*

#### VITAL

The University encourages all staff to live our VITAL values which are: Valuing People, Innovators, Together, Accountable, Leaders.

### Equality and Diversity

We believe that equality, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equality support our efforts to attract a diverse range of high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equality, diversity and inclusion.