Lecturer (4 Posts)
Department of Computer Science

Closing date: 25 February 2018
Interview date: TBC
Vacancy reference: 6365
INTRODUCTION

The Department of Computer Science is recruiting four new Lecturers, within a recruitment program of up to twelve new lectureships over the next three years. We wish to develop our excellent research and teaching base by appointing enthusiastic colleagues to take part in our future developments, to strengthen our current research groups and to contribute to our major research themes: Critical Systems; Health, Well-being and Human-Centred Computing; Analytics; and Beyond Human Vision, or to our interdisciplinary research centres: the Digital Creativity Labs, the York Centre for Complex Systems Analysis, the Quantum Communications Hub and the Assured Autonomy International Programme for the safety of autonomous systems.

We strongly maintain the principle of research-driven teaching, from the earliest undergraduate modules to the most advanced Masters provision, which allows for a continual re-examination of our module content and programme structure. As a new Lecturer you will build up teaching responsibility progressively across undergraduate and postgraduate programmes, for both core Computer Science topics and your own academic specialisms. All students undertake a major project, proposed and supervised by an academic, normally on a one-one basis. Further, our new Lecturers will be encouraged to develop their careers by proposing research projects and applying for research funding to undertake these projects. You will also help to recruit and to supervise PhD students. The appointees will be responsible to the Head of Department, however it is our practice for new appointees to be mentored in both teaching and research development by other senior colleagues.
Main purpose of the role

- To develop research objectives, projects and proposals and carry out individual or collaborative research projects.
- To lead on and/or contribute to the production of high quality research outputs and research outcomes.
- To develop and deliver teaching across the core Computer Science curriculum
- To design and deliver specialist modules to advanced undergraduate and taught postgraduate students
- To supervise PhD students
- To undertake effectively a range of administrative and managerial responsibilities

Key responsibilities

Role holders will be required to undertake some or all of the duties below, building up scope of duties over time.

Research and Scholarship

- To develop and promote the research activities of the department by developing a personal research plan independently or in collaboration with others as part of a larger research team.
- To plan, manage and undertake research activities, and to manage and guide the work of staff and research students in your own specialist area.
- To develop innovative research proposals and to obtain external funding for them.
- To publish high quality original research in appropriate journals or other relevant media and to attend international conferences

Teaching and the Promotion of Learning

- To develop innovative teaching materials and techniques.
- To undertake module design and take responsibility for the quality of their provision.
- To plan, deliver and critically review teaching and assessment activities, and provide high-quality feedback to students.
- To undertake academic supervision of taught students and act as a project supervisor within your own specialist subject area.
- To develop taught project proposals, supervise and assess them.
- To identify areas for revision or improvement of current teaching provision, and to propose and implement improvements.

Management and Administration

- To undertake the duties of Module Co-ordinator for one or more taught modules and be responsible for the design, development and management of them.
- To contribute to the recruitment and selection of research and teaching staff.
- To contribute to the administration and management of the department.
- To advise, supervise and give guidance to other departmental staff as appropriate.
- To build internal and external contacts in order to develop and expand collaborative research and teaching.
# PERSON SPECIFICATION

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<tr>
<th>Qualifications</th>
<th>Essential / Desirable</th>
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<tr>
<td>PhD in Computer Science or cognate discipline.</td>
<td>Essential</td>
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<td>Appropriate academic professional and teaching qualifications.</td>
<td>Desirable</td>
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## Knowledge

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<tr>
<td>Sound knowledge of the core undergraduate computer science curriculum.</td>
<td>Essential</td>
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<td>Knowledge of a range of teaching techniques to enthuse and engage students, leading to positive educational outcomes.</td>
<td>Essential</td>
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<tr>
<td>Knowledge of a range of research techniques and methodologies.</td>
<td>Essential</td>
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<td>Knowledge of research impact, and an enthusiasm for delivering research with social, economic or cultural impact.</td>
<td>Essential</td>
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<td>Research expertise and publication record relevant to one or more of the Departmental themes, or within one of the Department’s research groups.</td>
<td>Essential</td>
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## Skills, abilities and competencies

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<th>Essential / Desirable</th>
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<tr>
<td>Ability to design, deliver, and assess a significant number of topics in our core undergraduate curriculum, including: Programming, Algorithms and Data Structures, Programming Languages and Compilers, Discrete Mathematics and Computational Theory, Operating Systems, Networks, Databases, Digital Hardware and Computer Architectures, Software Engineering, and Human Factors.</td>
<td>Essential</td>
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<tr>
<td>Ability to design, deliver and assess advanced modules in one or more of the Department's research areas or themes.</td>
<td>Essential</td>
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<td>Demonstrated ability to develop research objectives, projects and proposals.</td>
<td>Essential</td>
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<td>Ability to extend, transform, and apply knowledge from scholarship.</td>
<td>Essential</td>
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<td>Highly developed oral and written communication skills, including ability to write and/or contribute to publications and/or to disseminate research findings using other appropriate media.</td>
<td>Essential</td>
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## Experience

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<th>Essential / Desirable</th>
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<td>Proven ability to carry out high quality research which is publicly evidenced with publications, grants, etc.</td>
<td>Essential</td>
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<td>Evidence of dissemination of research findings which may include: the presentation of papers at conferences and workshops; participation in public engagement events to disseminate research; and articles in leading academic journals.</td>
<td>Essential</td>
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<td>Experience of taking responsibility for teaching and learning.</td>
<td>Essential</td>
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<td>Contribution to successful planning, design and delivery of teaching, with exemplification of teaching materials.</td>
<td>Essential</td>
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## PERSON SPECIFICATION

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<th>Personal attributes</th>
<th>Essential / Desirable</th>
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<tr>
<td>Show attention to detail and commitment to high quality.</td>
<td>Essential</td>
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<td>Display creativity, initiative and judgement in applying appropriate approaches to teaching, learning support and scholarly activities.</td>
<td>Desirable</td>
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<td>Positive attitude to colleagues and students.</td>
<td>Essential</td>
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<td>Willingness to work proactively with colleagues in other work areas/institutions.</td>
<td>Essential</td>
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<td>Ability to plan and prioritise own work in order to meet deadlines.</td>
<td>Essential</td>
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<td>Commitment to personal development and updating of knowledge and skills.</td>
<td>Essential</td>
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<td>Collaborative ethos.</td>
<td>Essential</td>
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<td>Willingness to engage in the affairs of the department/university outside of their chosen field, for example undertaking management and administration duties.</td>
<td>Essential</td>
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The Department of Computer Science has a very strong international research record. The Research Excellence Framework (REF) 2014 results ranked York's Computer Science 7th overall in the UK, 5th for impact and 6th for environment. 90% of our REF submission was rated as "world leading" or "internationally excellent". This result confirms the longstanding global reach and real-world significance of our research and makes us one of the best departments in the country for nurturing excellent research and achieving economic, social and cultural impact from research. The Department has strong and long-standing links with industry and is highly regarded for its Continuing Professional Development (CPD) courses.

The Department currently comprises four major research themes: Critical Systems; Health, Well-being and Human-Centred Computing; Analytics; and Beyond Human Vision, and four interdisciplinary research centres: the Digital Creativity Labs, the York Centre for Complex Systems Analysis, the Quantum Communications Hub and the Assured Autonomy International Programme for the safety of autonomous systems. Our research themes are supported by activity within more specialist research groups: https://www.cs.york.ac.uk/research/about-research/, most with long-established international reputations. However, many of the interesting problems facing computer science are inter-disciplinary, and the need for work across disciplines is reflected in our four major themes and four interdisciplinary research centres.

The post-holders will join the theme most closely aligned with their research experience and interests, and will build up their research profile within that group. This development will be aided by a member of the group, or other senior member of staff, acting as a mentor in all aspects of research development including supervising PhD students, developing research project proposals, and acquiring internal and external funding. Staff will also be associated with themes or centres, as appropriate.

The initial teaching duties will vary with the post-holders’ experience, but will include at least one undergraduate module (or part-module), an undergraduate tutorial group, and several dissertation project students. The lecturing is likely to be as part of a small team, and a teaching mentor will be assigned to each post-holder to aid their integration and development. In addition, the post-holders will take part in the York Postgraduate Certificate in Academic Practice programme, unless they have an equivalent qualification.

The Department is housed in purpose-built accommodation within the Heslington Campus East. The Department has 55 members of academic and teaching staff and 28 research associates and fellows employed on research grants and contracts. Seven specialist teaching staff deliver modules to industry as part of our highly regarded CPD programme in safety critical systems.

We have a vibrant graduate school of approximately 160 research students, and around 550 undergraduate and 220 full-time and part-time taught postgraduate students. The professional support team comprises 24 administrative staff and 12 technical and computing staff.
THE UNIVERSITY

Founded on principles of excellence, equality and opportunity for all, the University of York opened in 1963 with just 230 students. In 2017 it is the home of more than 17,000 students across more than 30 academic departments and research centres. Since opening over fifty years ago, we have become one of the world’s leading universities and a member of the prestigious Russell Group.

We are consistently recognised as one of the leading Higher Education Institutes and one of just six post-war universities which appear in the world top 100 (2013-14) and 15th in the Times & Sunday Times league table (2016). The University of York has won six Times Higher Education (THE) Awards and five Queen’s Anniversary Prizes.

The University is proud of its association with Athena SWAN, holding 12 awards in support of gender equality, representation and success for all, with gold awards for Chemistry and Biology and a University-wide bronze award.

Of 154 universities that took part in the Research Excellence Framework (REF) in 2014, The University of York ranked 14th overall and 10th for the impact of our research. The University is consistently in the top ten UK research universities and attracts over £60m a year of funding from research alone.

Our vision is to make the University of York a world leader in the creation of knowledge through fundamental and applied research, the sharing of knowledge by teaching students from varied backgrounds and the application of knowledge for the health, prosperity and well-being of people and society.
Attractive workplace

Centred around the picturesque village of Heslington on the edge of the city of York, our colleges are set in an attractive landscaped campus. York enjoys a safe, friendly atmosphere with facilities including bars, shops, theatres and concert halls all within easy walking distance.

The University has undergone an unprecedented period of expansion and renewal since 2000. We have invested in twenty new buildings on the original campus and have completed the first and second phases of a £750m campus expansion. Our investment in new colleges, teaching and learning spaces, laboratories, research facilities and a new sports village mean there has never been a better time to join us.

During this period of change we've worked hard to retain our friendly, informal and collegiate atmosphere, which is important to our core values of inclusivity and interdisciplinarity.

We have a thriving international community and are committed to providing staff moving to York with as much support as possible through our Relocation Package and Welcome Officers.

The University aims to offer a nurturing and supportive environment as an employer. Flexible working hours, nursery facilities, childcare vouchers, cycle to work scheme, generous holidays and an attractive pension scheme all make the University of York one of the region’s leading employers.

For further information please visit our employee benefit pages.
THE CITY AND THE REGION

The City of York

Internationally acclaimed for its rich heritage and historic architecture, York's bustling streets are filled with visitors from all over the world. Within its medieval walls you will find the iconic gothic Minster, Clifford’s Tower and the Shambles - just a few of the many attractions.

But York isn’t just a great place to visit - it’s also a great place to live and work. While nourishing a vibrant cosmopolitan atmosphere, York still maintains the friendly sense of community unique to a small city.

Visit www.visityork.org for more information on the city of York

Shopping, culture and entertainment

York boasts specialist and unique boutiques but also all the high street stores on its busy shopping streets. Alongside them you will find cinemas, theatres, an opera house, art galleries, a vast range of restaurants, live music venues and clubs. York is particularly renowned for its multitude of pubs and bars, from the modern to the medieval.

Housing and schools

Whether you choose to live close to the city, in one of the surrounding villages or further afield, you will find a wide range of housing within comfortable distance of York and the University. For families, the area has a range of excellent schools both in the state and independent sector.

Great location

York is one of Britain’s best-connected cities. Halfway between London and Edinburgh on the East Coast mainline, on intercity trains you can reach London King’s Cross in less than two hours and Edinburgh in two and a half hours. York is also well served by road links, and it is easily accessible from the A1, M1 and the M62.

For those travelling from overseas, Manchester Airport is two hours away and Heathrow Airport just three and a half. Flights from nearby Leeds Bradford Airport provide easy access to mainland Europe. By Eurostar from London St Pancras, Paris is just over six hours away.

Yorkshire

The Lonely Planet guide recently declared Yorkshire the third best region in the world to visit. There is something to cater to every taste, whether it be the rugged landscapes of the Moors or the Dales, the picturesque seaside towns of Scarborough and Robin Hoods Bay, the gothic architecture of Whitby or the vibrancy of cosmopolitan Leeds.
Apply online

- Go to https://jobs.york.ac.uk
- Find this job using reference 6365
- Complete the online application form

You will need to submit your completed application by midnight (local UK time) on 25 February 2018.

What will I need?

You will need to upload:

- your CV
- a letter describing how you meet the requirements of the job

You will also need details of 3 referees.

Help and assistance

Direct any informal queries to cs-lectureships@york.ac.uk

If you have any questions about your application, contact the HR Services team:

recruitment@york.ac.uk

+44 (0)1904 324835