Job Related Information

This document includes information about the role for which you are applying and the information you will need to provide with your application.

1. Role Details

<table>
<thead>
<tr>
<th>Vacancy reference</th>
<th>14786</th>
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<tbody>
<tr>
<td>Job title:</td>
<td>Software and Systems Developer</td>
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<tr>
<td>Reports to:</td>
<td>Research Computer Manager, STEM Specialist Support Unit</td>
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<tr>
<td>Salary:</td>
<td>£32,548 - £38,833</td>
</tr>
<tr>
<td>Terms and conditions:</td>
<td>Academic Related</td>
</tr>
<tr>
<td>Grade</td>
<td>7</td>
</tr>
<tr>
<td>Duration of post:</td>
<td>Fixed-term to 31 March 2021. Secondments will also be considered.</td>
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<tr>
<td>Working hours:</td>
<td>Full Time (preferred) or Part Time (min. 0.6 FTE)</td>
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<tr>
<td>Location:</td>
<td>Milton Keynes</td>
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<tr>
<td>Closing date:</td>
<td>Noon, Monday 25th June 2018</td>
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<tr>
<td>Type of application form accepted:</td>
<td>Short version (with CV and Covering letter)</td>
</tr>
<tr>
<td>Number of referees required:</td>
<td>Three</td>
</tr>
<tr>
<td>Unit recruitment contact:</td>
<td>Rekha Ramesh</td>
</tr>
</tbody>
</table>
2. Summary of duties

The post holder will be a member of the Open University (OU) team who are leading the “University Learners” theme of the Institute of Coding (IoC - www.instituteofcoding.org). The Institute is a unique and innovative collaboration led by University of Bath, the OU, Aston University, Coventry University, and Queen Mary University of London, that is supported by £20m from the Higher Education Funding Council for England and match funding from universities and industry partners. This is a hugely exciting new venture to try to address the digital skills gap: equipping learners of all disciplines to fulfil their potential in the digital economy and meet employment needs. This post will be key part of the development and of the OU’s contributions to this initiative.

The post holder will be a major contributor to the design and implementation of a world-class infrastructure to support the teaching at a distance of a variety of Computing subjects, including data science, programming, cyber security and robotics. The infrastructure will allow the easy creation and update of virtual environments with the necessary software for each module, integrate with the teaching materials and learning analytics on the Virtual Learning Environment (VLE), and allow tutors to feedback on the students’ work.

The successful candidate will work with the academic subject specialists, and with the teams in IT and the STEM Faculty that maintain the IT and VLE infrastructure, developed the award-winning OpenSTEM Labs (https://ounews.co/science-mct/openstem-labs-wins-outstanding-digital-innovation-of-the-year-award/) and the OU’s learning analytics platform.

The work will involve:

- Playing the major role in specifying, designing, implementing and deploying the infrastructure
- Documenting the process of how to create, configure and update module-specific environments
- Training and supporting academics in doing the above
- Providing input to the specification and selection of the hardware needed for a pilot trial
- Participating in the evaluation of the pilot
- Contributing to IoC deliverables, in particular the documentation and sharing of the design, deployment process and evaluation

3. Person specification

Requirements (E = Essential/ D = Desirable)

**Education, qualifications and training**

- Degree-level (or relevant equivalent experience)

**Knowledge, work and other relevant experience**

**Essential:**

- Relevant experience in the effective specification, design, development, production or integration of software solutions and systems
- Experience with virtualisation and container technologies, e.g. Docker and Kubernetes

**Desirable:**

- Experience of DevOps practices and techniques
- Experience of open source web development frameworks, e.g. Drupal
- Knowledge of Virtual Learning Environments, e.g. Moodle
Personal abilities and qualities

**Essential:**
- Effective written and oral communication skills
- The ability to quickly learn new technologies and a willingness to attain new skills through training.
- A proven ability to research potential solutions to problems that a project can encounter
- A ‘self-starter’ – the ability to pro-actively assess a project situation and take relevant action but use good judgment to refer as necessary
- A proven ability to work well within a team environment and independently
- Well organised, flexible and able to prioritise own workload

**Desirable:**
- Availability for short trips in England to IoC partner meetings

4. Role specific requirements e.g. Shift working

5. About the unit/department

**Faculty of Science, Technology, Engineering & Mathematics**

The Faculty of Science, Technology, Engineering and Mathematics (STEM) comprises:

- School of Computing & Communications
- School of Environment, Earth & Ecosystem Sciences
- School of Engineering & Innovation
- School of Life, Health & Chemical Sciences
- School of Mathematics & Statistics
- School of Physical Sciences
- Knowledge Media Institute
- Deanery including teams supporting Curriculum, Research and Enterprise, Laboratory Infrastructure and Faculty Administration

“We aspire to be world leaders in inclusive, innovative and high impact STEM teaching and research, equipping learners, employers and society with the capabilities to meet tomorrow’s challenges”

The Faculty of STEM consists of 700 staff and 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting more than 20,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £20M) than any other Faculty in the University, supported by a comprehensive laboratory infrastructure.

We are proud of our distinctive values and capabilities underpinning our aspiration:

**We are inclusive:**
- We transform people’s lives, ensuring STEM education is openly accessible to many thousands of students from diverse backgrounds – our students express high satisfaction with their study experience
• We engage the public in exciting citizen science and engineering, including through free open educational resources, multi-platform broadcasting, outreach to inspire the next generation and with programmes to encourage more women into STEM

We are highly innovative:
• We are at the forefront of innovative developments in teaching practical science and engineering at a distance, through simulated and remote access laboratories and practical experimentation
• Our high-quality teaching and curriculum are informed by world-leading research, strong links with professional bodies and communities of practitioners, as well as by scholarship focused on continuously improving our STEM pedagogy

We deliver significant social and economic impact:
• We provide STEM higher education at a scale and reach unsurpassed in the UK, with a sizeable international reach and further growth potential
• We inject transferable STEM skills and knowledge direct into the workplace for immediate employee and employer benefit, as students combine study while working
• The employability value of our courses is underpinned by accreditation from leading STEM Professional Bodies and Learned Societies, as well as partnerships and sponsorship with leading employers
• Our high quality, applied and academically relevant teaching and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skill-shortages across the UK

School of Computing and Communications
The School of Computing and Communications has around 80 academic and research staff, and is also home for a number of visiting researchers and both full-time and part-time research students. Our main research interests lie in the areas of security/privacy, software engineering, communication technology, human-computer interaction, ubiquitous computing, computer science education, technology enhanced learning, computational linguistics, the history of technology, and critical information studies. Our objectives are to:

a. Transform students’ lives through innovative and dynamic teaching enriched by world-class research and scholarship.
b. Develop graduates with technical, analytical and creative skills who meet the highest expectations of employers and who can make a difference in their workplaces.
c. Lead and shape the digital revolution through people-centred, interdisciplinary, collaborative research and scholarship that transforms society.
d. Look outwards to engage with individuals and external bodies, sharing our knowledge and developing mutually beneficial partnerships, so together we can create a more technically and socially aware digital society.
e. Be a vibrant, agile and inclusive academic community that promotes academic excellence in all areas of teaching, research and external engagement.

We teach a comprehensive range of undergraduate and postgraduate qualifications. We have approximately 11,000 students registered for our undergraduate BSc degree. Examples of our innovative teaching are the 'Introduction to Cyber Security' ([http://bit.ly/1pMMKhk](http://bit.ly/1pMMKhk)) and 'Learn to Code for Data Analysis' ([http://bit.ly/2HHp25M](http://bit.ly/2HHp25M)) MOOCs, hosted on Futurelearn, which have been studied by over 40,000 learners worldwide.

We aim for, and achieve, international excellence in research and teaching, leading on many projects including smart cities development. The OU’s Computing research performed strongly in the Research Excellence Framework (REF 2014) assessment, with 75% of outputs rated world-leading or internationally-excellent (up from 70% in 2008), and an excellent research environment (100% rated world-leading or internationally-excellent).

The School’s research is:
• Empowering: placing people at the centre
• Situated: focusing as much on context as on technology
• Disruptive: creatively disrupting discipline borders to give fresh perspectives and solutions

In other words, we focus on the use of technology to enhance human experience.

Our strong sense of collegiality and community continues to shape and direct the interdisciplinary approaches used throughout our work. The School of Computing and Communications holds the Athena SWAN Bronze Award and is committed to promoting gender equality.

6. How to obtain more information about the role or application process

If you would like to discuss the particulars of this role before making an application please contact Derek Sheills on +44 (0)1908652534 or email: Derek.Sheills@open.ac.uk.

If you have any questions regarding the application process please contact Mary Dahunsi on +44 (0)1908659573 or email: STEM.Recruitment@open.ac.uk

7. The application process and where to send completed applications

Your application should contain:

Your application should include:

a) A completed short application form
b) Covering letter detailing precisely how you match our requirements and the person specification and what you can bring to this post. This will form an important part of the selection process as well as helping us to assess your communication skills in writing.
c) An up-to-date CV

Please ensure that your application reaches the University by: Noon, 25th June 2018

E-mail your application to: STEM-Recruitment@open.ac.uk

Or post it to Name/Job title: Rekha Ramesh, Staffing Adviser

Department/Unit: Deanery, Faculty of Science, Technology, Engineering & Mathematics

Address: The Open University, Walton Hall, Milton Keynes, MK7 6AA

8. Selection process and date of interview

The interview panel will be chaired by: Geoff Bradshaw, Research Computer Manager, STEM-SSU

The other members of the interview panel will include: To be confirmed
The interviews will take place on: To be confirmed

The selection process for this post will include
To be confirmed

We will let you know as soon as possible after the closing date whether you have been shortlisted for interview. Further details on the selection process will also be sent to shortlisted candidates.

Applications received after the closing date will not be accepted.