Senior Research Development Engineer (STRETCH)

18 Month fixed term contract - Full time
Grade 8
Walton Hall, Milton Keynes

The Role

The post holder will be extending and further developing a state-of-the-art healthcare IoT platform for monitoring and supporting older adults living in their own homes, as well as contributing and advising on other research projects in the school, in areas such as other healthcare applications, food security, and drones. The post holder will lead other software development projects, help develop bids for further funding and contribute to academic writing when appropriate.

The post holder will also work closely with academics, post-doctoral researchers and PhD students advising on directions for software development and promote good research software engineering practice within the faculty.

This is a post initially associated with the EPSRC funded STRETCH research project in the School of Computing and Communications. If further funding is secured, the ultimate aim of this appointment is to lead the provision of research software engineering across the Faculty in a permanent appointment within the lifetime of this contract.

Key Duties

Support the Faculty's Research, including:

- Development of web applications
- Project manage as well as lead the design, development, testing, and deployment of large software platforms using industry best practices.
- Coordinating the Open University Research Software Engineering group and representing the university at National RSE meetings and conferences
- Advising researchers on appropriate software to solve problems
- Designing and leading internal training sessions for postdocs and PhD students on modern software development best practices.
- Manage and mentor interns, apprentices and small teams of software developers.
The project will see the post holder working with:

- Continuous Integration/Continuous Deployment technology such as Gitlab CI/CD, Gitlab Runner, Azure Piplines, Jenkins-CI, Travis-CI
- User Interface (UI) design and development using modern web frameworks (Angular, Vue, React)
- User Experience (UX) design and development
- Mobile App development (Android, iOS)
- Mobile application frameworks such as React Native or Ionic.
- C/C++

Whilst some experience in these areas are helpful, there is the opportunity to develop in these areas as part of the role.
Person Specification

Skills and experience

**Essential:**
- A degree in a relevant subject or equivalent experience
- Proven record of building large applications, ideally using Django/Django REST Framework.
- Excellent working knowledge of Python, ideally alongside Python Celery, Redis or RabbitMQ
- Good communication and interpersonal skills to liaise with internal and external stakeholders
- Experience of software systems architecture and design
- A proven ability to advise stakeholders/business users on appropriate software to solve problems
- People Management experience

**Desirable:**
- Knowledge of a current Continuous Integration/Continuous Deployment technology such as Gitlab CI/CD, Gitlab Runner, Azure Pipelines, Jenkins-CI, Travis-CI
- User Interface (UI) design and development using modern web frameworks (Angular, Vue, React)
- User Experience (UX) design and development
- Mobile App development (Android, iOS)
- Knowledge of mobile application frameworks such as React Native or Ionic.
- Knowledge of C/C++
About the Unit

Faculty of Science, Technology, Engineering & Mathematics
The Faculty of Science, Technology, Engineering and Mathematics (STEM) is comprised:

- 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 2500 staff including 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting nearly 19,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £17M) 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.