

Job Title: Research Associate

Grade: 7

**Salary:** £39,105 to 45,163 per annum, pro-rata if part-time

**Department:** School of Informatics

Hours/Contract: Full time, fixed term until 31 December 2025

**Job Family:** Teaching and Research

Reference: 11385

#### **Role Purpose**

Personalised Space Technology Exercise Platform (P-STEP) is an exciting innovation project funded bythe European Space Agency (ESA) and University of Leicester to develop a state of the art, clinicallyguided, exercise advice app incorporating real time environmental air pollution data, designed forpeople with long term health conditions. The project is led and will be delivered by an interdisciplinary team from across the University, including specialists working in informatics, health and clinical sciences, earth observation and air quality, and psychology and user engagement.

As the Android Developer (Research Associate) you will be responsible for the design, development, testing and deployment of the Android app for the P-STEP project. You will be the main developer of

the Android app and will work both independently as well as intensively with the other members of PSTEP App Development Team (WP3000). You will be confident in the use GIS SDKs for Android (likeMapBox SDK) as well as in other Android SDKs, libraries, tools and best practices so as to develop

Android apps to a high standard. The post-holder is expected to work independently on the development and delivery of P-STEP, a University of Leicester flagship project aiming to develop an App that promotes physical activity through providing exercise prescriptions and suggesting walking routes that are free from air pollution.

## **Main Duties and Responsibilities**

- Contribute to user requirements analysis and evaluation activities guiding the design and
  development of the Android app. Contribute to the deployment of a continuous delivery
  workflow, including technology for managing software development methodology,
  configuration management (including code reviews and release management), automated
  regression testing (including acceptance testing, integration testing and end-to-end testing),
  deployment platform configuration, deployment process, automated encrypted backups.
- Lead, as the main Android developer, the design, development, testing and evaluation of an Android app with map integration and gamification features that communicates with the P-STEP platform server and that stores local data. Facilitation of work for a research assistant on these tasks.
- Design and development of a user interface for facilitating patient engagement and personalized support in the P-STEP Android app.













- Contribute to the integration and testing of data and services developed by other project teams (WP1000, WP2000) via the Android app.
- Design and development of the app demonstrator. Contribute to the dissemination of the project by contributing to documentation and presentations.
- Production of documentation for NHS digital assessment, focussing on the following areas: data protection; security; usability and accessibility; interoperability; and technical stability

### **Internal and External Relationships**

Internal: Work closely with the members of the App Development team in Informatics, including the cloud solutions architect and line manager.

External: Collaborate with the other teams in Health Sciences and Space Technology

### **Planning and Organising**

The post-holder is expected to contribute to planning and organization activities of the App Development team, collaborating with other research associates in the writing up of reports with the Principal Investigators.

### **Qualifications, Knowledge and Experience**

#### **Essential**

- Postgraduate degree in Computer Science/Software Engineering or equivalent work experience.
- Demonstrable expertise in designing, developing, testing Android apps by means of a portfolio
  of projects available on (possibly open) source repositories, hosted on GitHub/Gitlab or
  similar.
- Demonstrable expertise in GIS mapping libraries (like MapBox SDK) and associated SDKs for Android
- Knowledge in agile and collaborative tools (git and project management services provided on Gitlab or GitHub)
- Strong communication skills
- Excellent collaborative and teamwork skills
- Excellent problem solving and independent learning skills

### Desirable

Knowledge in user experience for Android













- Knowledge in game development and AR
- Knowledge in requirements analysis and evaluation
- Knowledge in data modelling and application performance management
- A basic understanding of health and social care provision in the UK

## **Skills, Abilities and Competencies**

#### **Essential**

- Ability to work at a high level of accuracy and at high analytical sensitivity
- Excellent IT skills
- Excellent organisational skills
- Good written and oral communication skills
- Ability to prioritise workload in order to meet deadlines
- Ability to work as part of a team
- Highly motivated and proactive
- Ability to interpret analytical data

#### Desirable

- Experience of App development
- Experience of multiplatform development and iOS conversion

### **Criminal Declaration**

If you become an employee, you must inform your manager immediately, in writing, if you are the subject of any current or future police investigations/legal proceedings, which could result in a criminal offence, conviction, caution, bind-over or charges, or warnings.

## **Supporting University Activities**

As a University of Leicester citizen, you are expected to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We expect all staff as citizens to work flexibly across the University if required.

## **University Values**













**Inclusive** - We are diverse in our makeup and united in ambition. Our diversity is our strength and makes our community stronger.

**Inspiring** - We are passionate about inspiring individuals to succeed and realise their ambitions. We challenge our community to think differently, to get involved, and to constantly embrace new ideas.

**Impactful** - As Citizens of Change we will generate new ideas which deliver impact and empower our community

## **Equity and Diversity**

We believe that equity, 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 equity 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 equity, diversity and inclusion.









