Extended Reality (XR) Solutions Developer (KTP Associate)

Reference:	EHA2421-0323
Salary:	£33,348 - £36,333 per annum Grade 7, Points 27-30
Contract Type:	Fixed Term for 32 months
Hours:	Full Time (36.25 hours per week)
Location:	Gener8 Spaces Ltd, Burnley, Lancashire
Accountable to:	Dr. Amr Ahmed, Head of Computer Science
Reporting to:	Professor Ardhendu Behera, Professor of Computer Vision & AI (KTP Academic Supervisor)

About the Faculty

The Faculty of Arts & Sciences is the largest and most diverse Faculty in the University, with a distinctive range of undergraduate and post graduate courses, research, and knowledge exchange.

Knowledge Transfer Partnerships (KTP) is a national scheme operated by Innovate UK to facilitate business-university collaboration in tackling key, strategic business-led innovation projects. KTPs are high impact projects which use research-informed expertise to achieve significant levels of innovation. The KTP Associate bridges academic team and the business to deliver the project, applying knowledge to tackle real business challenges.

About the Role

This role offers an exciting opportunity to work on the development of Gener8 Spaces' new Gener8 XR (G8XR) product, which drives their strategic aim to improve educational attainment through the use of immersive and touch technology. The company is currently in a period of significant growth and this KTP provides the basis for their next generation of immersive learning capabilities. Gener8 are looking to establish a repeatable 'development blueprint' that will enable rapid deployment of a variety of XR technologies to their customers, particularly in education and healthcare training facilities. The KTP will be aiming to generate and commercialize a number of 'fore-runner' XR products which rely on different branch specialisms of XR and would be applicable for use in different learning environments, for example:

• Marker-based scenarios (artificial and natural)
• Simultaneous Localization and Mapping (SLAM)
• Partial and Full-Body tracking
• 3D Object modelling, visualization, and animation

You will hold a suitable academic qualification in a relevant computer science field, for example augmented/extended or virtual reality, computer vision, or AI. The role requires someone with a good range of technical skills relevant to XR development including: a relevant programming language (e.g., Java, C#, Python, Unity, JavaScript); XR SDKs and; 3D modelling and animation. You will also need to understand the software development methodologies (for web, mobile apps, or games), and desirably a good understanding of XR UX design principles.

You will also have strong written and interpersonal skills, which are vital for being able to work with a wide range of technical and non-technical stakeholders on the project. You will also need to be highly organized, with a strong attention to detail.

As part of the project, KTP Associates do also benefit from a generous training and development budget, a KTP management training course, and the opportunity to contribute to academic research outputs. You may be eligible to enrol in a Master of Research (MRes) or PhD degree, depending on your expertise and experiences fulfilling Edge Hill University's requirement criteria.

For informal enquiries about this vacancy, you may wish to contact: Professor Ardhendu Behera at beheraa@edgehill.ac.uk and/or Professor Yonghuai Liu at liuyo@edgehill.ac.uk.

Our Company partner: Gener8 Spaces Ltd

Gener8 Spaces are internationally recognised providers of immersive learning spaces for sectors including education, health, hazardous training, and corporate training environments. With clients around the globe, Gener8 Space's aim is to utilise immersive learning environments to improve academic attainment and knowledge retention within their customer base's users.

Gener8 have an established customer base of 'first generation' immersive rooms, the KTP will enable Gener8 to offer next generation immersive spaces, including XR capability and true 3D environments.

To allow for the effective delivery of the project and transfer of knowledge, the post will be based full time at the premises of Gener8 Spaces, in Burnley, Lancashire.

Duties and Responsibilities

1. To coordinate the delivery of the KTP, working with all stakeholders to ensure efficiency and success.

2. Work with stakeholders to define the full scope of requirements for the project, securing consensus, prioritising needs, manage development cycles and ensuring widespread adoption and embedding through all stakeholders.

3. To design the architecture and the components of the proposed solution.

4. To develop and integrate the necessary components of the system using an agile, test-driven development approach.

5. To work closely with the academic and company teams to address technical and/or research challenges arising from the project.

6. To produce full detailed documentation of the system at key points throughout the project.

7. Preparation and delivery of resources and training materials for relevant user levels.

8. To assist in the writing of academic output to support the findings of the project.

9. To adhere to the project management, administrative and other compliance protocols required for the KTP.

10. The successful candidate will be required to travel to various stakeholder offices around the UK throughout the project.

In addition to the above all Edge Hill University staff are required to:

a) Adhere to all Edge Hill's policies and procedures, including Equality and Diversity and Health and Safety

b) Respect confidentiality: all confidential information should be kept in confidence and not released to unauthorised persons

c) Undertake appropriate learning and development activities as required

d) Participate in Edge Hill's Performance Review and Development Scheme

e) Adhere to Edge Hill University's environmental policy and guidelines and undertake tasks in a sustainable manner

f) Demonstrate excellent Customer Care in dealing with all customers

Eligibility

Candidates should note that shortlisting will be based on information provided on the application form with regard to the applicant's ability to meet the criteria outlined in the Person Specification attached.

Internal staff wishing to apply for a fixed term role as a secondment opportunity must discuss this with their existing line manager before applying.

Please note that applications will be assessed against the Person Specification using the following criteria, therefore, applicants should provide evidence of their ability to meet all criteria.

Methods of Assessment include Application Form (A), Supporting Statement (S), Interview (I), Test (T) & Presentation (P).

		Essential	Desirable	Method of assessment (A/S/I/T/P)
Qualifications				
1.	A good honours degree in a relevant computer science field.	*		A
2.	Higher qualifications relevant to the post, such as an MSc/MEng or PhD in a relevant computer science field.		*	A
Experience and Knowledge				
3.	Experience or strong understanding of augmented reality software development, including use of XR SDKs	*		S/I/P
4.	In-depth knowledge of a relevant object-oriented development language	*		S/I
5.	In-depth knowledge of XR modelling techniques	*		S/I/P
6.	A strong understanding of information and cyber security considerations for XR	*		S/I
7.	Good knowledge of unit testing, functional testing and testing frameworks	*		S/I
8.	A strong understanding of agile software development.	*		S/I/P
9.	A good knowledge of 3D object modelling, animation and computer vision using appropriate open-source tools/software		*	S/I/P
Abilities and Skills				
10.	Highly organized, stringent attention to detail and able to prioritise workloads	*		S/I

	Essential	Desirable	Method of assessment (A/S/I/T/P)
11. Proven ability to work successfully within a project team and solve problems	*		I
12. Ability to communicate clearly and effectively with both technical and non-technical audiences, written and in-person	*		S/I/P
13. Willing and able to travel	*		S/I

How to Apply

When you are ready to start the formal application process, please visit our Current Vacancies page and click 'vacancies', search for the role you wish to apply for, and click 'Apply Online'. The online application form can be completed in stages and can be revisited at any time. The form automatically saves as you enter your information and it is simple to move backwards and forwards throughout at any time prior to submission. Help is available at each stage to guide you through the form. Before final submission, you can preview your application and can then choose to refine or submit the form.

Please refer to the advert for the closing date for this vacancy, all applications must be submitted by 11:59pm on this date. Following the closing date, we will contact you by email to let you know whether or not you have been shortlisted to participate in the next stage of the selection process. We try our best to inform all applicants within two working weeks following the closing date.

Application > Shortlisting > Interview > Outcome

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At Edge Hill University we value the benefits a rich and diverse workforce brings to our community and therefore welcome applications from all sections of society.