**RESEARCH ASSOCIATE IN GAMEPLAY & DEVELOPMENT**

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| School/Department: | SCHOOL FOR GAMES AND CREATIVE TECHNOLOGY |
| Grade: | 8 |
| Reports to: | RODERICK MORGAN |
| Responsible for: | - |
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| Job Summary and Purpose: | As part of a successful UKRI bid, in partnership with Mercurial Dance, UCA is seeking a Unity developer with mobile game experience and an understanding of creative research principles. The research associate will be working within the School of Games and Creative Technology at UCA, to collaborate with Mercurial Dance and other stakeholders, on the EmbodyXR® project.  EmbodyXR is an immersive Virtual Reality dance art experience, aimed at raising mental health awareness & mitigating anxiety in Young People aged 13-25. EmbodyXR engages players in mindful movement through a series of challenges that draw upon choreographed movement, high performance management and cognitive behavioural techniques. Completing the activities in the fully-immersive 3D environments via a Virtual Reality headset encourages focus and self-reflection and aims to reduce the physical manifestations of the Flight/Fight/Freeze response (FFFR) in people with anxiety. Meanwhile an associated mobile game continues and reinforces the learnings from the VR experience beyond the initial immersive entry point.  The post holder will be working alongside a growing team led by the Creative Director of Mercurial Dance, working alongside a Unity UX Developer and Game Artist, as well as freelance creatives working on audio composition, scriptwriting, motion capture, 3D character design and voice over. They will also be collaborating with the UCA Wellbeing Team on research and user testing.  The post holder will be primarily responsible for implementing user facing development and design elements of the VR game and mobile app. They will work with a team of developers and use cross-platform development workflows in the Unity Game engine, to ensure the VR game and mobile app can be effectively deployed across appropriate devices. As the project evolves the post holder will focus on user experience and quality assurance expressed through user testing and iteration. Throughout the process the post holder will engage with research frameworks to interrogate and document processes and outcomes which will feed into the overarching research of the goals of the project.  **Role Location**  This is a hybrid role based primarily at UCA Farnham (GU9), with the option to also work from Mercurial Dance’s offices in Coventry (CV1). The position requires weekly in-person working, with activities taking place across both base locations and various user testing sites throughout the Midlands. To best support creative collaboration and project delivery, we will prioritise candidates who can commit to being on-site for the majority of the working week.  **Research/Development time split**  It is anticipated that 85% of the time will be allocated to development deliverables and 15% of the time will be spent on research and research outcomes. |

**01 MAIN DUTIES**

This professional role will encompass all of the following, but the balance of duties and responsibilities will be determined in agreement with your line manager and the principles of the stated job purpose.

* 1. General Duties
     1.  Use technical knowledge and creative insight to influence the direction of features and player experience.
     2.  Contribute to team-wide improvements in workflow and technical practice.
     3.  To stay up-to-date with developments in game engines, XR platforms, and creative technology tools relevant to the research focus.
     4.  To embed game development expertise within a broader research framework, contributing to knowledge production through making.
     5.  To act as a bridge between technical development and research, supporting creative and analytical workflows.
     6.  To ensure that research outputs, including software artefacts and experimental findings, are disseminated to academic and industry audiences.
     7.  To support the research team in evaluating player experience, usability, and interaction through structured studies.
     8.  To work cross-functionally to align testing, design, and development around player experience goals.
  2. Specialist Duties
     1. **Design and Development**
     2. To design and implement modular systems that support current gameplay and can scale for future content or features.
     3. To develop polished, performant game experiences tailored to the constraints and affordances of VR and mobile platforms.
     4. To ensure technical implementation supports immersive, intuitive, and comfortable user experiences in VR and mobile contexts.
     5. To ensure the technical infrastructure is in place to support testing, publishing, and cross-device compatibility.
     6. To actively debug, refactor and use appropriate version control management to maintain the code base.
     7. **User Experience and Quality Assurance**
     8. To identify and resolve usability issues to ensure intuitive, frictionless, and enjoyable player interactions.
     9. To validate gameplay mechanics and user flows through direct observation and testing with target users.
     10. To design and execute manual and exploratory test plans to ensure stability, consistency, and compliance across platforms.
     11. To ensure visual and interaction consistency with design intent and platform standards.
     12. To champion accessibility from early design through testing, ensuring the product is usable by the widest audience.
     13. To ensure UX and QA insights are clear, actionable, and effectively drive decision-making.
     14. **Research**
     15. To work within a development team to test and explore specific research questions around gameplay, immersion, user engagement, and accessibility.

**02**  **DUTIES OF ALL STAFF**

2.1 To undertake such other duties as are within the scope and spirit of the job purpose, the job title, and the grade.

2.2 Maintain and promote health, safety & wellbeing awareness and commitment within the framework of the University's Health, Safety & Wellbeing policy.

2.3 Take responsibility for health and safety of yourself and others in carrying out the duties of the role.

2.4 To promote equality, diversity and inclusion in your performance of your duties.

2.5 Undertake any other work and hours of work as required to commensurate with the level and responsibility of the post.

2.6 To actively participate in learning and development to meet the requirements of your role and the University.

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| **03 Selection Matrix** | | **Essential** | **Desirable** | **Used to shortlist** |
| **Qualifications** | | | | |
| 1 | Appropriate Post Graduate degree (or equivalent professional practice) in a relevant subject | 🗶 |  | 🗶 |
| 2 | Industry recognised certification in workflow tools (Unity Certified Professional or similar) |  | 🗶 | 🗶 |
| 3 | PhD or other doctoral qualification |  | 🗶 | 🗶 |
| **Knowledge & Experience** | | | | |
| 4 | Established and innovative practice in design for digital products (User Experience, Game Design, Immersive Design). | 🗶 |  | 🗶 |
| 5 | Proven knowledge and experience of working with the Unity Game Engine. | 🗶 |  |  |
| 6 | Experience of working collaboratively with external organisations and individuals to initiate and/or deliver research or research-oriented enterprise projects. | 🗶 |  | 🗶 |
| 7 | Successful track record of instigating, development and realisation of initiatives in research and/or enterprise. |  | 🗶 | 🗶 |
| 8 | Established knowledge of quality assurance practices around digital products, and the delivery of such practices. |  | 🗶 | 🗶 |
| 9 | Experience of working with mental health and or wellness professionals in the context of the creation of digital products. |  | 🗶 | 🗶 |
| **Personal Attributes and Behaviours** | | | | |
| 10 | Ability to motivate and work in a collaborative way with staff and stakeholders. | 🗶 |  |  |
| 11 | To possess in-depth knowledge and understanding of own specialism to enable advancement and innovation within the field. | 🗶 |  |  |
| 12 | Effective communication skills, both written and verbal. | 🗶 |  |  |
| 13 | Demonstrate, promote, and facilitate collaborative ways of working across the partner organisations. | 🗶 |  |  |
| 14 | Ability to set appropriate priorities within a diverse portfolio, without direct supervision and committed to delivering results. | 🗶 |  |  |
| 15 | Demonstrate an innovative and collaborative approach to solving problems often under pressure. | 🗶 |  |  |
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Does the role require a DBS? Yes