
VIRTUAL REALITY DEVELOPER

JUNE 2021



Location:	Parkville
Division:	Orygen Digital, Research & Translation
Salary range:	\$70,000 – \$75,000 per annum pro rata, commensurate with skills and experience
Employment Type:	Part-time (0.6 – 0.8 FTE) Fixed Term position available until August 2022
Position reports to:	Project Leads: Project Management, Youth Early Psychosis Medical Lead & Technical Leads

1. POSITION SUMMARY

The Virtual Reality (VR) Developer will work collaboratively and supported by the Senior VR Developer, Project Manager, Tech Lead and Research Team to create high-quality VR and Virtual World (VW) based interventions for young people's mental health.

VR Developer will also work within a varied team consisting of software developers, psychologists, psychiatrists and content creators (including young people with lived experience of mental health difficulties), to support development of new VR and VW interventions to support youth mental health treatment. The main responsibility will be producing VR prototype applications, which involves various aspects of game's creation from concept to finished product including coding, programming, audio, design, UX/UI, production and visual arts.

With the ability to work independently, the VR Developer will receive general direction from both project leads and technical leads. This role is expected to operate with some autonomy and to show initiative and a sense of responsibility for the effective operation of the Orygen Digital's team. Note that you will be required to work flexibly in a small team across a range of tasks that primarily involve VR environment and game development and programming, however may involve broader activities such as UX testing and design. You will have to work creatively with the team to identify innovative solutions to developing MVP prototypes to meet project requirements. We are seeking someone who is passionate about creative and innovative applications of virtual reality for advancing treatment of young people with mental health difficulties.

2. POSITION CONTEXT

At Orygen, our leadership and staff work to deliver cutting-edge research, policy development, innovative clinical services, and evidence-based training and education to ensure that there is continuous improvement in the treatments and care provided to young people experiencing mental ill-health. Orygen Digital, the digital mental health division of Orygen, designs, delivers and evaluates evidenced-based digital services for youth mental health, including Moderated Online Social Therapy (MOST), virtual reality and just-in-time mobile interventions. Orygen Digital requires an experienced individual to join a growing team of researchers, clinical

psychologists, software engineers, writers, artists, young people and frontline mental health professionals to assist in the development of novel VR interventions for young people with mental health difficulties.

This role will be based at Orygen Digital's new Virtual Reality and Technology Innovations Space, a cutting-edge VR development and testing lab and clinic based at Orygen, Parkville.

3. ABOUT ORYGEN

VISION	Young people to enjoy optimal mental health as they grow into adulthood.
MISSION	Reduce the impact of mental ill-health on young people, their families and society.
VALUES	Respect, Accountability, Teamwork, Excellence & Innovation.
COMMITMENTS	First Nations people of Australia, Young people and their families, LGBTIQA+ people & Culturally and linguistically diverse people.

4. KEY RESPONSIBILITIES/OUTCOMES

The VR Developer will:

- Work under the direction of the Senior VR Developer to produce user interfaces, VR interactions and gaming mechanisms in Unity3D for an online virtual world platform run on PC and other VR based applications
- Set up 3D assets and animation data in Unity3D.
- Conducting user testing for VR interventions to produce a high standard of UX and UI for VR applications
- Participate in the co-design process of the VR environments in conjunction with clinicians and young people with lived experience of mental health issues.
- Assist onsite with technical issues if required.
- Working with the research team during the iterative design process of the VR scenarios
- Work within an iterative design process to produce high quality VR applications, including testing and bug tracking
- Ensure that the virtual environments are optimised to deliver smooth experiences in VR and minimising adverse effects, such as motion sickness.
- Contribute to the creation of multimedia content for the public dissemination of our research.
- Stay up to date and report to the research search on latest developments in VR, gaming trends, techniques, best practices and related technologies
- Collaborate in other on-going research projects and participate with new ideas for future projects.
- Participate in other activities and responsibilities as directed by either of the Project Leads.

5. SELECTION CRITERIA

The following criteria must be met for consideration for this position:

1.1 Essential

- At least a diploma or higher in Computer Science, Software Engineering, Game Design or related technical field.
- Proficiency with C++ and/or C# or .net programming
- Understanding basic computing data structure (e.g. linked list, tree, array etc.)
- Experience working with Unity3D or Unreal Engine.
- Experience with VR development /3D game production.
- Experience with real time networked features (i.e., synchronous multiplayer games)
- Understanding of game software development and agile development.
- Experience with source control software (e.g. git, DevOps).
- Ability to implement a light-weight user interface independently without assistance.

- Ability to make decisions on game/feature architecture in collaboration with a team of non-technical experts and follow it through to implementation
- Self-motivated and comfortable dealing with the ambiguity of early-stage product development and testing
- Ability to explain technical information in simple language.
- Ability to solve problems and exercise high-level judgement where issues require escalation.
- Ability to work within a dynamic and collaborative team environment in an academic setting
- Ability to give and receive feedback to develop professionally
- Ability to prioritise in conjunction with excellent time management skills.
- Excellent oral and written communication.

1.2 Desirable

- Experience in UX principles and product management processes
- Ability to optimize applications for different platform targets.
- Good working understanding of both 2D and 3D animation.
- Ability to work with video (including from 360-degree cameras) and audio formats in Unity3D (e.g. .mp4, .mp3, .wave etc.)
- Interest in innovation and digital tools for youth mental health.

6. SPECIAL REQUIREMENTS

- Unrestricted right to live and work in Australia.
- A current National Police Check will be required.
- Any offer of employment is conditional upon receipt and maintenance of a satisfactory Working with Children Check.
- Occasional out of hours work may be required. Hours may change according to demand and engagement patterns on the platform.
- In line with Government guidelines, this position may need to be based at home during certain periods. As such the successful incumbent must have confidential home office space and reliable internet connection.

7. ACKNOWLEDGEMENT

Confirming this position description has been read and understood by:

Name:	
Signature:	
Date:	