

JOB DESCRIPTION

REF: 50047001

NOTE: *This job description does not form part of the employee's contract of employment but is provided for guidance. The precise duties and responsibilities of any job may be expected to change over time. Job Holders should be consulted over any proposed changes to this job description before implementation.*

Title: Research Associate – Virtual Reality Project

Reports to:

Line Manager, Markos Mentzelopoulos, Faculty of Science and Technology, University of Westminster

Company Supervisor, Aaron Ralby, CEO of Linguisticator Ltd

Department: Computer Science

Job Period: 12 Months

Salary: £30,000

Project Objective

The aim of the proposed project is to help Linguisticator to develop, maintain and expand a fully functional piece of Virtual Reality (VR) software, [Macunx VR](#), that enables users to build their own memory palaces. Building a memory palace relies heavily on the user's imagination, and it is therefore a challenging technique to teach. Virtual Reality offers new and exciting opportunities for making memory palaces a fast and accessible way of learning. Building a memory palace in VR means you can walk through a space that, while virtual, feels more physical and tangible than your imagination.

As part of the role you will have the opportunity to manage and deliver a challenging and strategic project for a business while being supported by Westminster University experts.

You will have the opportunity to work on latest technologies while gaining insight of industry needs. Further benefits include the opportunity to produce academic research papers and/or industry news articles on the work.

You will have dedicated specialised hardware support on VR. Further benefits will include publications and exhibitions as part of the project team.

Principle Accountabilities

1. To: contribute to the research programme of the department/institution in collaboration with Linguisticator Ltd.
2. To apply state-of-the-art development techniques for the development of the VR Macunx platform, including engine mechanics development, sdk's integration and deployment on online STEAM platform.
3. To develop appropriate, clear and secure client interfaces that will support the data transfer, manipulation and visualisation in a manner that assures and protects client confidentiality.
4. To co-ordinate own work with that of others, deal with problems which may affect the achievement of the project objectives independently and contribute to the planning and development of the project.
5. Present information on research progress and outcomes to a Principal Investigator and/or groups overseeing the research project
6. Write up results from own research activity and provide input into the research project's dissemination, in forms of report/ video documentation to support transfer knowledge for Linguisticator Ltd.
7. Work to deadlines and manage, with support, competing priorities.
8. Ensure that personal knowledge in relevant fields of study is kept up to date
9. To undertake any other duties as appropriate, within their competence, as required to fulfill the project objectives.

Job Context

This post forms an integral role in a Knowledge Exchange Embed Partnership ("KEEP+" - <http://keepplus.co.uk/>) project. You will be employed by the University of Westminster but work closely with Linguisticator Ltd. You will be spending some of your time at the company and becoming embedded within the company's working practices.

Person Specification

	Essential criteria	Desirable Criteria
Qualifications	First degree (2.1 or higher) in computer science or related subject or equivalent relevant experience A Master's degree in computer science/games development course or Working experience in games industry	
Training and	Practical experience of a variety of machine learning algorithms, both	Proven experience in an enterprise environment (or

Experience	<p>supervised and unsupervised (e.g.: Procedural generation algorithms, game concept algorithms)</p> <p>Working experience in game development and at least one released game made with Unity3d, HTML5, or MonoGame</p> <p>Practical experience in Object Oriented Programming for Games Development Engines</p> <p>Experience of working with databases</p> <p>Strong experience in software development with multiple programming languages (C#, C++, Python).</p> <p>Experience in Unity engine and VR or WebVR integration</p> <p>Strong background in Computer Graphics: Direct X or OpenGL, WebGL</p> <p>The candidate will need to demonstrate evidence of working under agile engineering project approach (competitions/ small indie projects can be acceptable).</p> <p>Experience with adaptive learning and dynamic game</p> <p>Knowledge of version control system such as SVN/GIT/Perforce</p>	<p>project) with the following skills and experience will be advantageous:</p> <ul style="list-style-type: none"> • 3D modelling/Animation and experience in at least one modelling tool such as Blender, Maya or 3DSMax • Integration of models in unity engine • 3D interface design • User Experience & Interface Design • VR using Oculus Rift or HTC Vive
Aptitude and abilities	<p>Ability to communicate well to non-specialist audience and presenting technical work in a concise manner</p> <p>Ability to work to tight deadlines and organise workload with minimal supervision</p> <p>Ability to carry out work accurately and with great attention to detail</p> <p>Ability to establish good working relationships with staff at a variety of levels and with external agencies</p> <p>Ability to work in an efficient and organised manner with the ability to</p>	<p>Knowledge of foreign languages like German or Slavic languages</p>

	<p>prioritise and handle multiple tasks</p> <p>A proactive approach to problem solving</p> <p>A flexible attitude to changing workloads</p> <p>Excellent verbal and written communication and capable to explain and defend, to different users, both the technical merits of an algorithmic solution and the separate benefits for users and the operating environment.</p> <p>Strong communication and interpersonal skills with the ability to work with a wide range of professionals, including company management, facilitators, customers</p>	
Personal Attributes	<p>Self-motivated with a flexible positive attitude</p> <p>Ability to work well under pressure on own initiative and as part of a busy team</p> <p>Team-player who enjoys sharing ideas and giving/receiving feedback</p> <p>Keen learner who enjoys working with the latest, cutting-edge, technologies</p> <p>Confident manner, methodical, flexible and adaptive</p> <p>Pragmatic and practical outlook</p> <p>Professional conduct demonstrating discretion and tact</p> <p>Commitment to maintain confidentiality at all times</p>	