Research Assistant, 3D Visualisation

ROLE DESCRIPTION

ROLE SUMMARY

The primary duties of the 3D visualisation Research Assistant will be to develop 3D models, 2D graphs/illustrations and VR model assets required for VR training projects. The post is in the School of Arts and Creative Industries.

Responsibilities will include general, day to day development of the assets, acquisition of data (i.e. images, videos, blueprints etc.), and production of demonstration material.

LINE MANAGEMENT RESPONSIBILITY FOR:

This role does not have any line management responsibilities currently.

MAIN DUTIES AND RESPONSIBILITIES

Undertake general research tasks, for example:

- developing 3D models (i.e. 3D modelling, texturing, rendering);
- developing High-Quality, Photorealistic Renderings and videos for demonstration purposes.
- continuing to update knowledge and develop skills;

- taking part in and presenting at meetings if required;
- optimising 3D assets for VR applications
- In particular, to develop 3D assets for VR medical projects. Support the development of assets for other relevant projects.
- Liaise with staff within the same project to generate data and with medical staff for the accurate development of assets.
- Have excellent knowledge of 3D visualisation programmes (Maya and/or 3Dsmax), Zbrush, Substance and 2D programmes (Adobe Suite).
- Have excellent knowledge of exporting 3D models/scenes to Unreal- Engine – optimisation of 3D models for real-time VR applications.
- Collaborate with practitioners and researchers inside and outside the University, participating in related research and forming relationships for future collaboration; liaise with research colleagues and support staff on routine matters.
- Undertake other appropriate assignments as necessary.
- Actively participate as a member of a research team; attend and contribute to relevant meetings.
- Deal with problems which may affect the achievement of research objectives and deadlines; contribute to decisions affecting the work of the team.
- Contribute to the planning of research projects including:
  - Plan own day-to-day research activity within the framework of the agreed project.
  - Co-ordinate own work with that of others to avoid conflict or duplication of effort.
- Be responsible for ensuring that the information and records processed (received, created, used, stored, destroyed) on behalf of the University are managed in compliance with ALL applicable legislation, codes and policies e.g. Data Protection, Information Security and Records Management.
- Be responsible for ensuring that the information and records processed (received, created, used, stored, destroyed) on behalf of the University are managed in compliance with ALL applicable legislation, codes and policies e.g. Data Protection, Information Security and Records Management.

PERSON SPECIFICATION

	ESSENTIAL	DESIRABLE

EDUCATION / QUALIFICATIONS

	ESSENTIAL	DESIRABLE
• Undergraduate Degree in any subject related to 3D/2D visualisation and VR applications	✔	
• Master's degree in any subject related to 3D/2D visualisation and VR applications		✔

SKILLS / EXPERIENCE

	ESSENTIAL	DESIRABLE
• 3D Modelling	✔	
• Unreal-Engine	✔	
• 2D Graphic Design (Adobe Suite)	✔	
• Production of high-quality 3D renderings.	✔	
• Production of 3D Animations	✔	
• Excellent knowledge of 3D modelling software such as Maya and 3DSMax	✔	
• Excellent knowledge of 2D software such as Maya and 3DSMax	✔	
• Excellent knowledge of 2D Graphic Design software (Adobe Suite)	✔	
• Good interpersonal skills.	✔	
• Excellent IT skills with a good understanding of digital technologies.	✔	
• Ability to work under their own initiative and as a member of a team.	✔	
• Ability to prioritise competing demands, meet deadlines and work on more than one task at a time.	✔	
• Demonstrable experience in updating knowledge and developing skills.	✔	
• Demonstrable experience in maintaining a consistently high standard of development.	✔	
• Willing to carry out a variety of roles required to complete projects.	✔	

	ESSENTIAL	DESIRABLE
• Willing to carry out a variety of roles required to complete projects.	✔	
• Zbrush		✔
• Use of VR Headsets – Oculus/Meta Quest 2		✔
• Substance 3D Painter		✔
• Previous experience in 3D/VR visualisation		✔