



Position for a 3D Technical Artist / Engineer at the University of Geneva (Switzerland)



**UNIVERSITÉ
DE GENÈVE**
FACULTY OF SCIENCE

Job description

Description

The Biology Section of the University of Geneva is seeking for a **3D TECHNICAL ARTIST/Engineer** passionate about VR, game engines, high-end 3D ultra-realistic computer graphics and immersive UXs to be part of the team of our Centre for Immersive Visualization. The mission of our Centre for Immersive Visualization is to provide and develop tools for an improved understanding of complex 3D datasets through immersive (and interactive) data visualization. The Centre will feature state of the art Virtual Reality (VR) and Natural User Interfaces (NUIs) Hardware, High-End Visualization Softwares and a 6 Channel CAVE Immersive Projection System for real-time rendering of complex datasets and live 3D streaming from high-performance microscopes.

We are looking for a multi-talented **3D TECHNICAL ARTIST/Engineer** to participate in our Center's ambitions. Our Centre for Immersive Visualization will develop VR/AR experiences (based on Unity and/or Unreal Engine) as well as Immersive Data Visualization Applications to support research activities and to communicate results and achievements of biology and physics research laboratories to university students and the general public. Join our team of top biologists, computer scientists, physicists, and mathematicians to create tomorrow's Immersive Data Visualization applications with high-end rendering and innovative interaction capabilities.

The University of Geneva (UNIGE) is highly-renowned for its research and is among the top 1% best universities in the world. Geneva is an international city occupying a privileged geographical situation.

Responsibilities

- Collaborate with top Scientists to advance the 3D Reconstruction Workflow from Imagery devices and Microscopes to Immersive Visualization;
- Envision, create and integrate 3D content for multiple projects at varying stages of development, ranging from rapid prototyping to ultra-realistic visualization and interactive applications illustrating biological structures and processes;
- Provide innovative visualization tools and renderings for scientific publications and presentations;
- Track and manage 3D content across multiple engines and media;
- Seamline workflow solutions and pipelines across multiple engines and media.

Requirements

- Understanding of the state of the art in real-time rendering and ambition to produce ultra-realistic 3D contents (models, textures, shaders) while addressing unique technical challenges;
- Proficient with at least one major 3D modelling package such as Maya, Blender, 3ds Max, or Houdini;
- Knowledge of either Unreal Engine or Unity;

- Knowledge of the various aspects in real-time content production pipelines (mesh modelling and optimization, PBR materials, lighting, environment, post processing) as well as point-cloud and mesh processing, surface reconstruction;
- Strong attention to detail, good communication skills, and a proactive nature;
- Bachelor's (or higher) in fine arts, game design, digital media, or computer science or equivalent industry experience;
- Proficiency in English;
- Candidates with 3+ years of industry experience in the area of expertise will be favoured. A portfolio / reel of relevant work is mandatory.

Recommended Qualifications

- Proficiency in procedural content generation
- Good coding skills (C#, C++, Python, etc.)
- Experience with Rigging and Animation techniques (Inverse Kinematics, Forward Kinematics, Procedural animation etc.)
- Deep understanding of 3D math and geometry
- Experience in UI / UX design for interactive experiences
- Experience in VFX production (Creatures, ZivaVFX etc.)
- Some knowledge of French is a plus.

Applications should be submitted **exclusively** on-line at https://jobs.unige.ch/www/wd_portal.show_job?p_web_site_id=1&p_web_page_id=47784 by clicking on the 'Apply now' link. Please provide links to Portfolio, CV, and contact information (not support letters) of two to three persons of reference. *Additional information can be obtained from giovanni.landi@unige.ch or Ghislaine.Wharton@unige.ch*