



**UNIVERSITÉ
DE GENÈVE**

FACULTY OF SCIENCE

3D Animations and Interactive AR/VR in Biology: Position for a Computer Engineer at the University of Geneva (Switzerland)

The Section of Biology at the University of Geneva (building Sciences III, Boulevard d'Yvoy 4) offers one **full-time** position, at the level of **Research Associate** (requiring at least 3 years of professional experience or a PhD degree) **with tenure-track**, for an outstanding, highly motivated, and creative **computer scientist** with experience in **3D animation and Virtual/Augmented Reality** to produce **ultra-realistic visualisation and interactive applications**, as well as educational software, illustrating **biological structures and processes**.

The selected candidate will:

- ✓ Set-up and maintain a state-of-the-art immersive VR-CAVE and live 3D streaming from high-performance microscopes;
- ✓ Develop applications for the Microsoft HoloLens and/or VIVE platforms or equivalent;
- ✓ Propose new developments in data acquisition and visualisation (including, among others, motion capture, haptic devices, 3D microscopy, robotics and 360° videography) for research projects.

These developments will be targeted to the academic research community as well as to university students and the general public. The successful candidate will also contribute to research projects and interact with top biologists, computer scientists, physicists, and mathematicians.

Excellent written and verbal communication skills in the English language are mandatory. Good knowledge of the French language is an asset.

Candidates must have a master's degree in computer science and strong expertise in:

- ✓ 3D modelling, point cloud and mesh processing, surface reconstruction, texturing and animation (*e.g.*, with Autodesk Maya);
- ✓ C/C++ and GPU programming and optimisation of 3D graphics rendering;
- ✓ Development/optimisation of ultra-realistic AR/VR graphics (preferably in Unreal Engine and/or Unity).

Interests and skills in image processing/analysis, pattern recognition and robotics are useful additional assets.

The University of Geneva (UNIGE) is among the top 1% best universities in the world. Employees are remunerated according to the standards of UNIGE.

Geneva is an international city occupying a privileged geographical situation with its beautiful lake and the close-by Alps.

Candidates must apply ONLINE at

https://jobs.unige.ch/www/wd_portal.show_job?p_web_site_id=1&p_web_page_id=42481

(deadline: September 8, 2019) with a brief letter of interest, a CV, as well as contact information (not support letters) of two to three persons of reference.

Additional information can be obtained from michel.Milinkovitch@unige.ch.