



**INSTITUT
PASTEUR**



AVATAR MEDICAL

Advanced Volume Rendering Internship

Paris, France + Partially Remote

The **Decision & Bayesian Computation** laboratory of the **Institut Pasteur**, in conjunction with **AVATAR MEDICAL SAS**, is seeking an internship candidate in the topic of advanced volume rendering.

Based on technology developed at the **Institut Pasteur** and **Institut Curie**, **AVATAR MEDICAL SAS** uses advanced image processing algorithms coupled with virtual reality to transform medical images (e.g. CT-scans, MRI) into lifelike patient avatars without any pretreatment (segmentation or other).

Key to obtaining better results for surgeons is to enhance the quality of computer-generated 3D patient reconstructions. We are proposing a 3 to 6 month internship for a motivated student to continue the development and optimization of our 3D volume rendering system. Topics relevant to this internship opportunity include:

- Computer Graphics
- Image Processing
- Medical Imaging
- Numerical Optimization

The successful candidate will join a complementary team of software engineers, physicists and machine learning specialists.

Required Qualifications

- Object-oriented programming experience (C, C++, C#, etc.)
- Shader experience (GLSL, HLSL, Cg, etc.)
- Experience with Unity (Unreal Engine 4 experience is also appreciated)
- Proficiency with code versioning tools such as Git

Duration

3-6 months

Localization

Institut Pasteur (Paris, France)

Remote Working

In light of the COVID-19 pandemic, the position will be partially remote depending on the sanitary situation in the Ile-de-France region.

Contact

Interested candidates should contact Jean-Baptiste Masson (jbmasson@pasteur.fr) and Mohamed El Beheiry (mo@avatarmedical.ai) with their CV with a brief motivation letter.