



AVATAR MEDICAL

## Senior Full-Stack (C#) Developer

Paris, France + Partially Remote

**AVATAR MEDICAL SAS** is an exciting new MedTech start-up that radically enhances the manner in which surgeons prepare their surgeries.

Based on technology developed at the **Institut Pasteur** and **Institut Curie** (<https://diva.pasteur.fr/>), **AVATAR MEDICAL** uses advanced image processing algorithms coupled with virtual reality (VR) to transform medical images (e.g. CT-scans, MRI) into lifelike patient avatars. This vehicle grants surgeons an excellent understanding of their patients' pathology via an immersive and interactive VR experience. Our technology is meant to facilitate communication between radiologists and surgeons, allowing a more efficient and rapid surgical planning. Our technology has been recognized with numerous scientific and medical journal publications and **AVATAR MEDICAL** is a laureate of the prestigious BPI i-Lab Competition for innovative startup companies.

**AVATAR MEDICAL's** leadership team consists of passionate French and American co-founders with proven experience in tech entrepreneurship, sales, marketing and scientific research. Our technology, being commercialized between France and the USA, is developed by a talented team of physicists and software engineers who work closely with the **Decision & Bayesian Computation Laboratory** at **Institut Pasteur** (member of the **Paris Artificial Intelligence Research Institute, PRAIRIE**) and the **Breast Cancer, Gynecologic Cancer and Reconstructive Surgery Unity** at the **Institut Curie**.

We are recruiting a **Senior Full-Stack (C#) Developer** to join our technology team to spearhead our development efforts. The successful candidate will play an integral role in the development, benchmarking and rollout of our first clinical product. He/She will join a team consisting of 3 developers within a fast-growing startup currently consisting of 9 motivated individuals.

This position is a unique opportunity to contribute to a truly multidisciplinary project combining **medicine, image analysis, machine learning** and **gamification/serious gaming** approaches in an inspired effort to greatly improve the surgeon's work flow at the hospital. The successful candidate will gain valuable experience in the medtech domain and play a vital role in the commercialization process of a SaMD (Software as a Medical Device). In addition, he/she will also gain valuable experience in mentoring and leading a team of junior developers.

### Roles

- Make critical decisions, in coordination with the CTO and CSO, regarding the development and architecture of our software technology
- Work with our research team to implement, test and integrate novel learning algorithms into our software
- Build reusable code and libraries for future use
- Supervise, coach and mentor junior and intern developers through code reviews and best practices discussions
- Apply norms to our technology to comply with medical device certification (functional/non-functional testing and documentation)
- Play an integral role in the maintenance of our technology development roadmap



- Participate in salons and technology conferences to promote our technology

### **Required Qualifications**

- 5+ years experience with C#, C++, C
- 3+ years as a full-stack developer commercial software design experience
- Unity development experience (experience in Unreal Engine 4 appreciated)
- Ability to work in a modern Agile development environment (e.g. source control, release cycles, CI/CD)
- Experience in identifying bottlenecks and bugs (front-end and back-end) and devising solutions
- Solid object-oriented design skills and knowledge of application architecture patterns
- Strong interpersonal skills who can work in a highly interdisciplinary/international team environment
- Strong analytical and critical thinking skills and the ability to manage multiple projects
- Effectiveness at communicating design/engineering trade-offs
- Equivalent of undergraduate degree in software engineering, computer science or related discipline

### **Nice-to-Have Qualifications**

- Test-driven development experience
- Knowledge of image processing
- Knowledge and experience with compliance norms (e.g. IEC 62304, ISO 13485)
- Game development experience
- XR development experience
- Bilingual English/French

### **Contract Type**

Contrat à Durée Indéterminée (full-time permanent position)

### **Location**

The position will be located at Institut Pasteur (25-28 rue du Docteur Roux, Paris, France) and will involve occasional travel abroad including to the USA.

### **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.

### **Recruitment Process**

The successful recruitment process will take place as follows:

1. Selection for a first informal interview with the CTO
2. Selection for a second technical interview with the CTO
3. Interview with the CEO
4. Job offer

### **Contact**

Please contact [jobs@avatarmedical.ai](mailto:jobs@avatarmedical.ai) with your

- CV
- Link to your personal code repository (e.g. GitLab, GitHub)
- 3 References