



## **Job Title: Software Engineer for Brain Imaging (M/F)**

### **Job Description:**

You are a software development engineer, or hold a Ph.D. in computer science or electronics, with initial experience in user interface development or software development for medical applications. You are persistent, organized, considerate, and have a strong sense of teamwork.

We invite you to apply your talents to the development of a cutting-edge medical imaging device in the field of neuroimaging, which opens new pathways for the treatment of brain diseases (epilepsy, concussion, Alzheimer's, etc.). You will play a crucial role in developing the user interface and other software components of our imager, making this rich and complex imaging modality accessible to users. You will join the Research and Development team and work closely with System and Electronics engineers.

### **Duties**

- **Programming:** Develop software and user interfaces using Qt, Python, and potentially C/C++.
- **Specification and Ergonomics:** Interact with project partners, users, clients, and the marketing team to gather requirements and usability feedback, and evolve the interface accordingly.
- **Regulatory:** Become the reference for the medical software development standard (ISO 62304).
- **Technical Support:** Provide technical support for the imager's software, respond to questions from the team working with clients, and develop necessary fixes as needed.
- **Documentation and Communication:** Write technical reports and present results clearly and concisely to the research team and stakeholders.

### **Profile**

- Engineer or Ph.D. specialized in software, electronics, or related fields.
- Proficiency in Python and Qt. Good skills in C/C++ are a plus. Some experience in Cython, Numba, and parallel computing would also be beneficial.
- Mastery of version control tools.
- Ideally, professional experience in developing a user interface or applying the ISO 62304 standard.
- Strong analytical skills, problem-solving abilities, and the ability to work collaboratively within a high-level, friendly, multidisciplinary research team.
- Desire to have a meaningful impact through your work.
- Fluent in English

### **Contract**

We offer a permanent position, with salary based on your profile and experience. The start date is to be agreed upon, beginning from September 2024.

### **Company**

Mag4health is a startup spin off from CEA, located in Grenoble with a team of 20 people. It develops a new generation of magnetoencephalographs (MEG), brain imaging devices that track brain activity in real-time



with surgical precision. These imagers are routinely used in clinical settings for tumor ablation, epilepsy focal resection, and concussion diagnosis.

By integrating patented quantum technology that operates at room temperature, Mag4health eliminates the need for cryogenics required by older generation MEGs, which has been a major barrier to the widespread adoption of this imaging modality. The democratization of these non-invasive imagers will enable new clinical applications, such as rehabilitation after concussions and strokes, early diagnosis of Alzheimer's, and diagnosis of severe depression.

#### ## Application

If this ad speaks to you and you want a new challenge, send your application to [gladys@mag4health.com](mailto:gladys@mag4health.com) (CV and cover mail).