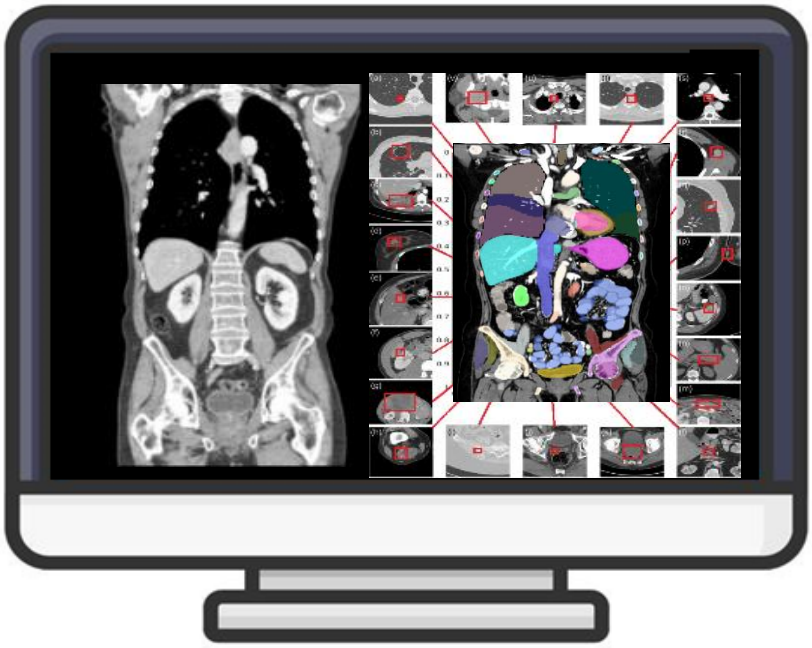
Medical Imaging Engineer: Automatic analysis of medical images to help with oncological monitoring

This position is offered by **Guerbet**, a world leader in Radiology, which offers a complete range of contrast agents and associated medical devices as well as solutions for diagnostic imaging (CT/Cath Lab, MRI) and interventional imaging.

Project description: Detection and classification of cancerous lesions to assist the radiologist

This project aims to develop artificial intelligence systems capable of automatically detecting and characterizing cancerous lesions from CT scan images. Using advanced deep learning and image processing techniques, our solution will analyze CT scans to identify suspicious abnormalities, such as nodules, masses, or tumors. In addition, it will provide a detailed characterization of these lesions, including their size, shape, texture, and location. This approach will allow for early detection of cancer, improving the chances of successful treatment and reducing the time to diagnosis. By combining expertise in radiology and AI, this project aims to revolutionize the detection and management of early-stage cancers, thus delivering a significant impact on healthcare.



Job description:

As a Medical Imaging Engineer on our team, you will play a critical role in the development, management and optimization of our data processing systems and software. You will be responsible for the design, implementation and maintenance of data pipelines, the manipulation and management of DICOM images as well as the integration of algorithms into our software products. You will also be a technical point of contact to work with Data Scientists to understand the needs for deployment, management of machine learning models, and proper documentation of systems, processes, and data flows.

Responsibilities:

- Design, develop, and deploy robust and scalable data pipelines.
- Manage and optimize databases, ensuring performance, security, and availability.
- Implement best practices for authentication and database access control.
- Collaborate with development teams to integrate data science solutions into products and services.
- Define the read and write pipelines of DICOM images and algorithm outputs.
- Develop tools and interfaces to facilitate data analysis and visualization.
- Ensure version management, documentation and monitoring of changes to deployed solutions.
- Participate in technology watch and propose continuous improvements in the processes and technologies used.

Skills required:

- Significant professional experience in software development.
- Knowledge of database authentication and security best practices.
- Experience in managing SaaS solutions with a containerization approach.
- Ability to work effectively in a team, with excellent communication skills.
- Expertise in version management, documentation and change tracking of deployed solutions.
- Proficiency in common programming languages such as Python, and associated tools (e.g., pandas, scikit-learn, pytorch).
- In-depth knowledge of software engineering principles and agile development methodologies.
- Very good knowledge of medical image formats (DICOM).

Terms:

- **Localisation**: Paris 104 boulevard de Sébastopol
- **Telecommuting**: 2 days / week
- **Manager** : Marc-Michel Rohé – Augmented Intelligence Technical Leader
- **Candidature** : marc-michel.rohe@guerbet.com