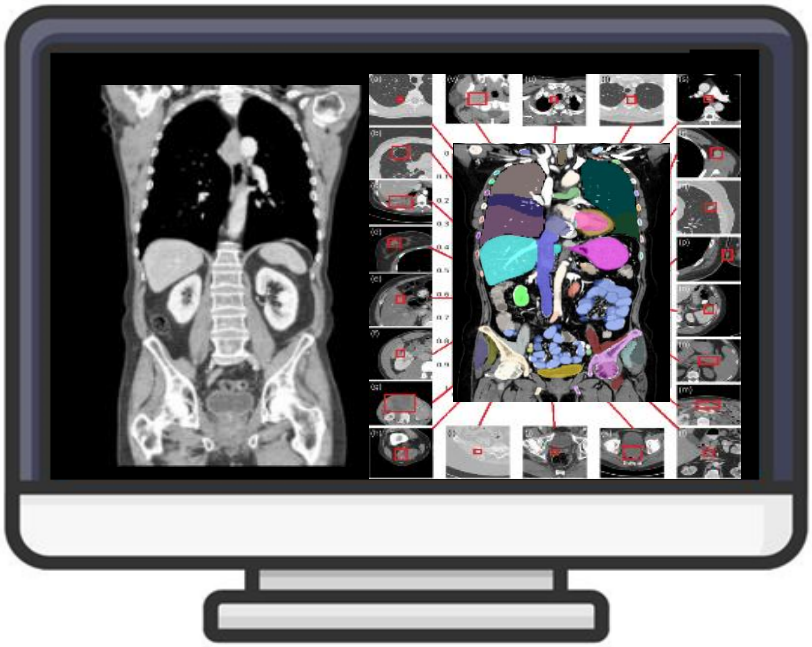
Data Scientist R&D: Automatic analysis of medical images to help with oncological monitoring

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 Research and Development Data Scientist within our team, you will play a key role in the innovation, design and optimization of our data processing systems and artificial intelligence models. You will be responsible for researching, developing, implementing, and maintaining machine learning models, as well as integrating them into our software products. You will work closely with radiologists and clinical teams to understand the specific needs of the medical field, in order to develop relevant and effective solutions.

Responsibilities:

- Innovate, design and optimize data processing systems and artificial intelligence models.
- Conduct research and development in machine learning.
- Implement and maintain machine learning models.
- Integrate machine learning models into software products.
- Collaborate closely with radiologists and clinical teams.
- Understand the specific needs of the medical field to develop relevant and effective solutions.

Skills required:

- PhD in Medical Imaging or Learning or Computer Vision
- Significant professional experience in data science and machine learning model development.
- Proficiency in common programming languages such as Python, and associated libraries (e.g., pandas, scikit-learn, PyTorch, TensorFlow).
- In-depth knowledge of machine learning and deep learning techniques.
- Ability to work effectively in a team, with excellent communication skills.
- Good knowledge of medical image formats (DICOM) and their handling is a plus.
- Understanding of clinical issues in medical imaging and ability to collaborate with health professionals.

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