Research Scientist (Ph.D.) "Data Science and Deep Learning applied to MRI", M / F

Since 2002, Median Technologies has been expanding the boundaries of the identification, interpretation, analysis and reporting of imaging data in the medical world. Our core activity is to develop advanced imaging software solutions and platforms for clinical drug development in oncology, diagnostic support, and cancer patient care. Our software solutions improve the management of cancer patients by helping to better identify pathologies, develop and select patient-specific therapies (precision medicine).

The company employs a highly-qualified team and leverages its scientific, technical, medical, and regulatory expertise to develop innovative medical imaging analysis software based on Artificial Intelligence, cloud computing and big data. We are driven by our core values that are essential to us. These values define who we are, what we do, the way we do it, and what we, as Median, aspire to:

- Leading innovation with purpose
- Committing to quality in all we do
- Supporting our customers in achieving their goals
- Always remembering to put the patient first

Today, we are a team of 170+ people spread worldwide in the US, Europe and China. Our company is growing in a fulfilling international and multicultural environment.

In the context of our research and development in artificial intelligence applied to medical imaging, we are looking for:
Research Scientist (Ph.D.) "Data Science and Deep Learning applied to MRI", M / F

Integrated into a multidisciplinary research and development team within the iBiopsy® project, you are a scientist in the research and development of innovative medical imaging solutions using machine learning and other AI methods.

Medical imaging is one of the fastest growing fields in machine learning. We are looking for an enthusiastic, dynamic, and organized Data Scientist with strong ML experience, excellent communication skills who will thrive at the heart of technological innovation.

Presentation of activities and main tasks linked to the job
Position under the supervision of Artificial Intelligence and Data Science Director

Responsibilities:

1. You will apply your AI/ML/Deep Learning knowledge to develop innovative and robust biomarkers using data coming from medical imaging systems such as MRI and CT scanners and any other relevant data sources.

2. Your work will involve research and development of innovative machine learning algorithms. Being part of our front-end innovation organization, you will actively scout, keep track of, evaluate, and leverage disruptive technologies, as well as the emergence of new industrial, academic, and technological trends.

3. You will work in collaboration with iBiopsy’s software development team as well as clinical science team.
4. In addition, you will transfer technology, and share insights and best practices across innovation teams. You will generate intellectual property for the company. You will be expected to author peer reviewed papers, present results at industry/scientific conferences.

5. We expect you to build breakthrough AI-enabled imaging solutions relying on cloud computing; applying supervised and unsupervised Machine Learning techniques to create value from the imaging and clinical data databases generated by our medical research and pharmaceutical industry partners. These AI-enabled systems and services go beyond image analysis to transform medical practice and drug development.

**Searched profile**
Education: PhD in in Mathematics, Computer Science or related fields

Main skills and Experience required:

- Minimum 3 years of relevant work experience in (deep) machine learning
- Experience with Medical Imaging (MRI required, CT is an asset), image signatures, large scale visual information extraction, features selection
- Relevant experience with Python, DL frameworks (i.e. Pytorch) and standard packages such as Scikit-learn, Numpy, Scipy, Pandas
- Experience desired in Semi-Supervised Learning, Self-supervised Learning, Reinforcement Learning, Adversarial methods.
- Extraction of multimodal feature extraction
- Author on related research publication / conferences
- Solid experience with opensource technologies to accelerate innovation

Required knowledge:

- In-depth technical knowledge of AI, deep learning and computer vision
- Strong fundamental knowledge of statistical data processing, regression techniques, neural networks, decision trees, clustering, pattern recognition, probability theory, stochastic systems, Bayesian inference, statistical techniques and dimensionality reduction

Additional skills:

- Strong interpersonal, communication and presentation skills as well as ability to work in global team and organize work
- Fluent in written and oral English

Legal
JobAd_DS MRI.docx
Date of issue: 23-Nov-21
Job location: Sophia Antipolis, France
Contract: Permanent, Open-Ended
Start: As Soon As Possible
Offered salary: will depend on candidate’s skills and experience.

Benefits offered by the company
- Fulfilling working and living environment
- Meal vouchers
- Canteen
- Health Plan

Why working with us?
- Join an international, multicultural and fast-growing company
- Be at the heart of innovation

Our Core Values

Leading innovation with purpose
Combine the spirit of innovation with our passion and conviction to help cure cancer and other debilitating diseases.

Committing to quality in all we do
Be dedicated to quality in everything we do. Quality begins with us and we are committed to it.

Supporting our customers in achieving their goals
Listen to the needs of our customers and help make their goals our goals through our innovation, imaging expertise, superior services and quality solutions.

Putting the patient first
There is a person at the other end of the images we analyze who is counting on us to do everything we can to help make them healthier.