Machine Learning Intern





JOB DESCRIPTION

Job Title: Machine Learning Intern

Reports to: Lotte Mulder **FLSA Status:** Exempt

Location: Netherlands (Amsterdam / Rotterdam)

COMPANY

DEEPHEALTH, A FULLY OWNED SUBSIDIARY OF RADNET, PROVIDES AI-POWERED HEALTH INFORMATICS TO EMPOWER BREAKTHROUGHS IN CARE DELIVERY. THE HEART OF OUR PORTFOLIO OF SOLUTIONS, THE DEEPHEALTH OS, IS A CLOUD-NATIVE OPERATING SYSTEM THAT ORCHESTRATES ALL DATA TO DRIVE VALUE ACROSS THE ENTERPRISE. DEEPHEALTH AIMS TO ELEVATE THE RADIOLOGIST'S ROLE BEYOND RADIOLOGY AND ACROSS THE ENTIRE CARE PATHWAY. IT EMPOWERS ALL USERS ACROSS THE CARE CONTINUUM WITH PERSONALIZED WORKFLOWS TO MAKE WORK EASIER AND MORE MEANINGFUL.

DeepHealth leverages advanced AI technologies in Breast, lung, prostate and Brain Health, and operational efficiencies to create end-to-end efficiency across the enterprise. www.deephealth.com

Role Summary

Are you passionate about medical image analysis and eager to apply your technical skills at a company leading the way in healthcare innovation? Join our R&D team to contribute to the development of algorithms for **White Matter Hyperintensity (WMH) segmentation** in brain MRI.

In this internship, you will work on enhancing our existing WMH segmentation algorithm. This could involve a variety of tasks such as data preparation, the implementation of new algorithm techniques, or improving existing methods. You will be embedded in a multidisciplinary team that focuses on applied research and development of machine learning algorithms for brain image analysis on MRI.

You will work on your own dedicated project, designed in collaboration with an experienced R&D engineer who will provide close mentorship throughout the internship.

Essential Duties and Responsibilities

- Gain domain knowledge:
 Get familiar with WMH segmentation, its clinical relevance, and imaging characteristics.
- Get familiar with our brain image analysis algorithms:
 Explore and understand the design, functionality, and performance of our existing algorithm for WMH segmentation.
- Literature research:

 Review state-of-the-art methods in academic and clinical research to inspire your approach.
- Project design:
 Define and shape your own research and development project, with guidance from your supervisor.

RadNet is an equal employment opportunity employer and treats all applicants and employees in a fair and non-discriminatory manner without regard to race, color, religion, sex (including pregnancy), gender, gender-identity, national origin, ancestry, genetic information, citizenship, age, mental or physical disability, veteran/military status, qualified disabled veteran, marital/ domestic partnership status, religious creed, medical condition, sexual orientation, political activity, or any other characteristic protected by federal, state or local laws. RadNet does participate in E-19 Verify.





- Data preparation and management:
 Process and prepare medical imaging datasets for model training and validation.
- Algorithm development:
 Implement, train, and evaluate machine learning models for WMH segmentation.
- Communication and reporting:
 Join our daily stand-ups and share your progress and findings in regular team meetings, contributing to collective learning.

Competencies:

- You adopt a structured and accurate way of working.
- You possess an analytical mindset and strong problem-solving skills.
- You are capable of working independently but also enjoy collaborating within a multidisciplinary team.
- Good communication skills in English and Dutch.

Minimum Qualifications, Education and Experience:

- Enrolled in a Master's program in Computer Science, Biomedical Engineering, Artificial Intelligence, Data Science, or related field
- Strong programming skills (Python; experience with PyTorch is a plus)
- Familiarity with machine learning techniques and statistical analysis

What We Offer:

- This is a temporary position (I.e. for a period between 3 months and 6 months).
- Internship allowance in accordance with university guidelines.
- We will provide free team lunches in our offices in Amsterdam or Rotterdam, and social events are frequently planned.

We are looking for someone complementing our current team rather than just fitting in with the crowd. So if you have any other skills we haven't mentioned yet, but will help DeepHealth grow and change the world of healthcare, please include them in your motivation letter.

For more information you can contact clinical-ai-engineering@deephealth.com. If you are interested in the position, please send your CV and a brief motivation letter.

Recruitment by commercial agencies in relation to this posting will not be accepted.

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