

Expert Machine Learning Research Engineer (Computer Vision)

We're a Berlin-based medtech startup dedicated to building AI-powered software that supports radiologists with their daily work: Analyzing medical images. Our first app "md.Brain", which helps identifying Alzheimer's and multiple sclerosis, is already certified as a medical product regarding and thereby ready for market launch. In 2019, we want to extend our product range to detect and diagnose a larger variety of medical conditions from image data. This is why we're looking for you to support our small team of machine learning enthusiasts!

Why should you apply

- Our vision has a purpose: Your work will help to make the diagnose of medical conditions faster, more accurate and more accessible
- You will have the opportunity to work on impactful, interesting and complex problems beyond standard deep learning object classification
- You will join a highly interdisciplinary team of motivated and highly collaborative data scientists, engineers, physicists and medical doctors with rapid decision-making processes
- Responsibility: You will play a key role in shaping our computer vision infrastructure and our product from the ground up
- You are free to employ the best suited technologies for the problem at hand, whether it's a cutting-edge deep learning architecture or a stochastic optimisation method from the 70s
- You will be working within a modern software infrastructure based on docker and AWS

Your tasks

- You will develop and train models for detecting and diagnosing medical conditions from radiological image data (MRI, CT)
- You will contribute to the design of our ML pipelines and our data platform and build systems to ensure data quality
- You will transfer your broad knowledge of ML best practices to our dev team
- You will build a robust testing framework to continuously measure the quality of our ML systems
- You will be researcher and engineer at the same time: You will scan publications and evaluate the latest research, you will implement, test and analyse the most promising approaches, and finally you will transfer your results to production with the help of our engineers
- When developing solutions, you have the needs of our stakeholders in mind: In healthcare, interpretability and confidence assessment of predictions are key aspects

Your profile

- 3+ years of work experience (industry or academia) in the field of computer vision
- Masters or Ph.D. in Engineering, Computer Science, Machine Learning (ML), Math, Statistics or a related field
- Solid understanding of ML algorithms, you know which one to choose for which problem
- You know how to design experiments and how to statistically analyse the results
- Experience with a common deep learning framework, preferably pytorch/tensorflow
- Experience in one or more of the following: CNNs (2D and 3D), Semantic Segmentation, Bayesian Modeling, Class Activation Mapping (or similar visualization techniques)
- Strong coding skills in Python (C/C++ is a plus)
- You know how to handle large data sets in different formats and from heterogeneous sources
- Solid engineering skills: You know about version control, unit testing and continuous integration, and you value best practices and good code quality

Nice to have:

- Experience in medical imaging
- Publications at top-tier conferences or in peer-reviewed journals, or talks at renowned conference
- Experience with docker
- Experience with cloud computing (e.g. on AWS)
- Experience with relational and non-relational data bases
- Knowledge of a Quality Management System

Our current tech stack

Python (pytorch, scikit-learn, statsmodels), docker, AWS, spark, gitlab-CI, mongoDB

If you're interested in joining us, please send your CV and some words why you would like to work for mediaire to our CTO Jörg: j.doepfert@mediaire.de