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Machine Learning Engineer

Location: Based at the Biospectal headquarters in Lausanne, Switzerland

Status: Full-time (100%) employment

Reports to: CTO.

Are you passionate about solving one of the most exciting and sophisticated challenges in medicine today using advanced machine learning methods?

Your work will positively impact one third of the world's population and has a direct impact on our core business. This is an applied research role – your models will be deployed to our production systems and objectively tested in clinical trials with hundreds of subjects. We have deep and rich datasets, which your passion for statistics and machine learning has the power to unlock.

We are looking for someone with hands-on experience building machine learning models, either in an academic or industrial setting.

The ideal candidate will have experience in regression and deep learning models.

You have:

- PhD or equivalent experience in computer science or related field, strong expertise in machine learning or computational modeling.
- 5+ years of experience in Machine Learning with hands-on experience building machine learning models or computational modeling, with a strong preference with past experience in hemodynamics-related models.
- 5+ years of practical experience with data analysis and data processing (cleaning, visualization, and modeling).
- Strong algorithm design and programming skills in Python.
- Knowledge of Pandas, Scikit-Learn, SciPy, NumPy, and TensorFlow.
- Practical experience with running machine learning pipelines in the cloud is a plus. Experience with Dask or similar frameworks is preferred.
- Experience with data (DVC or equivalents) and code (git) version control systems is a plus.
- Experience with ML Ops to test, deploy, manage, and monitor ML models in production is a plus.
- Experience working with medical devices, human physiology and/or diagnostics is a plus.
- Results-oriented person, with critical thinking and excellent problem-solving skills.
- Team player, with excellent multi-tasking and time-management skills, resilient and with a startup mindset.

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- High-level interpersonal, verbal, and written communication skills, ability to work with multicultural and multinational teams.
- English fluency required.

What you will do:

- Understand the medical needs, physiological factors, and clinical context driving your work, identify key objectives and requirements for algorithm optimization, develop strategies for algorithm design and development, formulate machine learning problem definitions and solutions, and develop these solutions from prototyping through final production code delivery supporting the platform.
- Collaborate and brainstorm with other team members on advanced solutions for estimating blood pressure.
- Develop documentation and specifications related to your work, both for internal and regulatory requirements.

- Engage in interdisciplinary collaboration: discuss and produce solutions working together with experts with different backgrounds (clinical, software, hardware, product management, etc.)

All applications (CV + cover letter) should be submitted to hr@biospectal.com