Technische Universität Berlin

Technische Universität Berlin offers an open position:

Research Assistant - salary grade E13 TV-L Berliner Hochschulen - For qualification

Part time employment may be possible

Prof. Dr. Titus Kühne (Charité) and Prof. Dr. Grégoire Montavon (BIFOLD) are looking for a research assistant in the field of machine learning and medicine for a BIFOLD Agility subproject titled “EXPLAIN-HF: Explainable AI in continuously learning systems for heart failure”.

The BIFOLD-JRG Montavon is developing new methods for explaining complex ML models with applications in medicine. The AG Kühne uses innovative ML models to answer clinically relevant questions in the field of cardiology. The aim of the project is to develop and implement XAI models to improve the diagnosis and prognosis of heart failure, with a particular focus on right ventricular failure. Furthermore, the transfer to routine data is to be carried out to establish a self-learning system in clinical practice.

Faculty IV - BIFOLD / Machine Learning
Reference number: IV-515/24 (starting at 01/01/25 / for 3 years / closing date for applications 18/10/24)

Working field:

The tasks include implementing XAI-enabled ML models to identify patterns and predictors for heart failure, developing a prototype of an infrastructure for model use by clinical users, and conducting clinical validations with independent data sets to test the generalizability and robustness of the AI models. Teaching Tasks.

Requirements:

- Successfully completed university studies (Master, Diplom or equivalent) in mathematics, physics, computer science or bioinformatics
- Several years of experience in the field of statistical methods and machine learning, preferably in the field of neural networks and explainable AI
- Very good programming skills (e.g. in Python, NumPy/SciPy, PyTorch/TensorFlow) are essential
- Experience in the analysis of medical data, including analysis of data from large biobanks, is required - The ability to teach in German and/or in English is required; willingness to acquire the respective missing language skills

Please send your written application, quoting the **reference number** and including the usual application documents (i.e. at least cover letter, CV, graduation certificates, grade overviews, etc.), to **Technische Universität Berlin - Die Präsidentin - Fakultät IV, Institut für Softwaretechnik und Theoretische Informatik, FG Maschinelles Lernen, NWG Prof. Dr. Grégoire Montavon, Sekr. MAR 4-1, Marchstr. 23, 10587 Berlin** or by email (one PDF file, max. 5 MB) at: **jobs@bifold.berlin**.

For cost reasons, application documents sent by post will not be returned. Please submit only copies.

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guarantee for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/ or quick access 214041.

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

Technische Universität Berlin - Die Präsidentin - Fakultät IV, Institut fu?r Softwaretechnik und Theoretische Informatik, FG Maschinelles Lernen, NWG Prof. Dr. Grégoire Montavon, Sekr. MAR 4-1, Marchstr. 23, 10587 Berlin

The vacancy is also available on the internet at
https://www.personalabteilung.tu-berlin.de/menue/jobs/

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