Technische Universität Berlin

Research Assistant - salary grade E13 TV-L Berliner Hochschulen- 1st qualification phase (PhD candidate)

part-time employment may be possible

Faculty IV - Electrical Engineering and Computer Science, The Berlin Institute for the Foundations of Learning and Data (BIFOLD) / machine learning
Reference number: IV-424/25 (starting at 01/01/26 / for 5 years / closing date for applications 17/10/25)

About us:

The Berlin Institute for the Foundations of Learning and Data (BIFOLD) at TU Berlin is looking for a doctoral researcher in the field of machine learning for the research group headed by Director Prof. Dr. Klaus-Robert Müller.

Your responsibility:

Research at the intersection of machine learning and mathematical modeling; learnability of structured data and networks with neuronal networks, particularly with Graph Neural Networks (GNNs) and tranformers; Explainable Artificial Intelligence (XAI) on structured data and data from physical systems such as quantum chemical processes; mathematical recapitulation and formalization of neural networks in terms of model specific dynamics; implementation of machine learning and XAI methods. Teaching tasks. The opportunity to do a doctorate is given.

Your profile:

- Successfully completed university degree (Master, Diplom or equivalent) in Computer Science, Physics, Engineering or Mathematics.
- Profound knowledge in machine learning, Explainable AI, graph theory, differential equations and quantum chemistry.
- Practical experience in the development and application of machine learning algorithms, as well as parallel computing on GPUs.
- Solid programming skills, especially experience with ML and linear algebra libraries (Python, PyTorch, JAX, etc.).
- The ability to teach in German and/or English is required; willingness to acquire the missing language skills.
- Experience in the field of mathematical modeling is an advantage.

How to apply:

Please send your **written** application, stating the **reference number**, with the usual application documents (i.e. cv, motivation letter, bsc and msc certificates together with grades reports; possibly recommendation letter) to the **Technical University of Berlin - The President - Faculty IV, Institute for Software Technology and Theoretical Computer Science, Machine Learning Group, Prof. Dr. Müller, MAR 4-1, Marchstr. 23, 10587 Berlin** or by e-mail (a PDF file, max. 5 MB) to: **jobs@bifold.berlin**.

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guaranty 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/.

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.

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

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