Technische Universität Berlin

Technische Universität Berlin offers an open position:

Research Assistant - salary grade E13 TV-L Berliner Hochschulen

part-time employment may be possible

Faculty V - Institute of Machine Design and Systems Engineering / Cyber-Physical Systems in Mechanical Engineering
Reference number: V-236/25 (starting at 01/08/25 / limited until 31/10/2027 / closing date for applications 27/06/25)

Working field:

- Research in nonlinear friction-affected structural dynamics utilizing machine learning methods (ML) in turbomachinery in the BMWK-funded project “Artificial Intelligence based Contact Identification and Mistuning Analysis (AICIM)”
- Development of novel learning paradigms that enhance classical Harmonic Balance methods
- Implementation of scientific open-source program code with high-quality standards
- Publication of scientific results in international journals and at scientific conferences
- Collaboration with project partners at the University of Stuttgart
- Supervision of student theses within the project scope
- Science communication for non-university audiences

Requirements:

- A successfully completed scientific university degree (Master, Diplom or equivalent) in Engineering Sciences, applied mathematics or computer science
- In-depth knowledge of non-linear structural dynamics, in particular the harmonic balance method
- Proven knowledge and practical experience in the application of deep learning
- Demonstrated programming experience in Python, Keras and PyTorch
- Very good English language skills

Desirable:

- Scientific publishing and presenting
- Curiosity, ability to work independently, communication skills, ability to work in a team, intercultural competences
- Good command of the German language

What we offer:

- An inclusive and appreciative working atmosphere in a committed and diverse team
- The compatibility of family and career through flexible working time models incl. home office

Please send your application, stating the **reference number**, with the usual documents (summarized in a PDF document, max. 5 MB) exclusively **by e-mail to: Prof. Dr. Marten Stender (merten.stender@tu-berlin.de)**.

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/ 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.

Technische Universität Berlin - Die Präsidentin - Fakultät V - Institut für Maschinenkonstruktion und Systemtechnik, FG Cyber-Physical Systems in Mechanical Engineering, Sekr. H 66, Straße des 17. Juni 135, 10623 Berlin

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

Zertifikat seit 2008
audit familiengerechte hochschule