Technische Universität Berlin

Technische Universität Berlin (TUB), Faculty IV – Electrical Engineering and Computer Science and the Potsdam

Institute for Climate Impact Research (PIK) are jointly appointing a

University Professor (W3)

In the field of **Data Science for Complex Systems Research**.
The position will be filled as a joint appointment (Jülicher Modell) and includes a managerial position at PIK.

Faculty IV
Reference number: IV-144/25 (starting at the earliest possible / permanent / closing date for applications 25/05/25)

Working field:

The new professor is expected to conduct innovative research in the field of data science and its applications specifically in the area of climate change research. A successful candidate should have substantially contributed to the methodological development in data-driven analysis and should have shown that its corresponding newly developed techniques have brought already substantial new insights in their field of application.

Particular research foci of the new joint Professorship will be several of the following:

- Advancement of machine learning- /artificial intelligence-methods for application in Earth systems science and modelling,
- Methodological development, e.g. in the context of Deep Learning for data-driven modelling of climate phenomena,
- Machine learning for Earth system modelling and downscaling,
- Physics-informed machine learning to combine physical and machine-learning approaches (hybrid modelling),
- Advancement of non-linear and complex systems theory in the context of climate applications,
- Application and development of advanced data analysis methods in the field of climate change research,
- Advancement of interdisciplinary approaches.

Teaching obligations amount to two hours per semester-week in the field of Climate Change & Data Science for Complex Systems at the TU Berlin.

Further responsibilities include leading and managing the department and its staff; supporting the advancement of junior scholars, women, and diversity; knowledge and/or technology transfer; initiatives to promote internationalization; gender and diversity competence, sustainability-oriented action as well as committee work.

Requirements:

Candidates are required to fulfill the criteria for appointment pursuant to Section 100 of the Berlin State Higher Education Act (BerlHG). These include a university degree, aptitude for academic work (generally demonstrated by an excellent doctorate), additional academic achievements (e.g. a positively evaluated junior professorship, a Habilitation or equivalent acquired), as well as an aptitude for teaching documented by a teaching portfolio (for further information regarding teaching portfolios, please see the TUB website: https://www.tu.berlin/go209650/

A precondition for the appointment is an interdisciplinary research biography, success in acquiring third-party funding, publications in methodological as well as in applied journals and conference proceedings, didactic excellence, and willingness to be actively involved in developing study programmes at the University.

Successful candidates have a proven outstanding national and international reputation, not only in respect to scientific excellence but also in respect to excellent leadership experience with proven experience in leading of a research department.

The candidate should bring expertise in new directions of data science and machine learning, and visions how to a) further develop them and b) to contribute to solution of cross-cutting problems studied at PIK such as global commons and planetary boundaries.

Desired requirements:
The Technische Universität Berlin expects its professors to be able to take responsibility for the management and strategic development of their subject area and their staff. For us, this also includes commitment to the promotion of young talent and women, gender and diversity competence in the sense of creating diversity-sensitive working and study conditions and setting impulses in research and teaching as well as participation in academic self-administration.

As a university with an international profile, we require the ability to teach in German and English or the willingness to acquire missing language skills within a reasonable period of time.

Technische Universität Berlin and PIK are determined to increase the proportion of women in research and teaching and therefore strongly encourage qualified female researchers to apply. Qualified individuals with disabilities will be favored.

TU Berlin is taking steps to make appointment procedures more equitable and has created a form to take academic age into account in appointment procedures as part of a pilot project. We kindly ask you to complete the form. You can

download it as an Excel file from the following web page: https://www.tu.berlin/en/go209647/.

The TU Berlin and PIK value the diversity of their members and are committed to the goals of equal opportunities. As part of a family-friendly policy, we offer our staff flexible working hours and support to help combine family and professional life. Technische Universität Berlin is a certified family-friendly higher education institution, and our Dual Career Service offers assistance to you and your family when relocating to Berlin.

Please submit your application by XX Month 2025 quoting the above reference number IV-144/25 and including all necessary documents (CV, publications list, copies of degree certificates, copies of up to five publications, research and teaching concept, teaching portfolio) exclusively in digital format (single file of max. 5 MB) to the Dean of Faculty IV, Prof. Dr. Marc Alexa at **berufungen@eecs.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 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/ Please send copies only. Original documents will not be returned.

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