

## Professor

Ecole/Institution/Société:  
**KU Leuven, Austria / Vienna**

Discipline:  
**Computational Engineering**

Type d'emploi::  
**Full-time**

Date de publication:  
**2025-02-23**

Personne à contacter:  
**If you wish to apply for this position, please specify that you saw it on AKATECH.tech**

University Faculty of Logic and Computation

Die Technische Universität Wien ist Österreichs größte Forschungs- und Bildungseinrichtung im technisch- naturwissenschaftlichen Bereich und leistet seit mehr als 200 Jahren einen unverzichtbaren Beitrag zur Sicherung der internationalen Wettbewerbsfähigkeit und Innovationskraft des Forschungsstandorts Österreich. Unter dem Motto "Technik für Menschen" betreiben an der TU Wien rund 26.000 Studierende und mehr als 4.000 Wissenschaftler\_innen in diesem Sinne Forschung, Lehre und Innovation.

At the Institute of Logic and Computation, in the Research Unit of Artificial Intelligence Techniques TU Wien is offering a position as university assistant prae-doc (all genders) to work in the Cluster of Excellence “Bilateral AI” limited to expected 4 years for 40 hours/week. You will work on neuroscience-inspired artificial intelligence (AI), with a focus on applying predictive coding in the medical domain. This research aims to address key limitations in current AI systems, such as their inability to provide reliable uncertainty estimation. By leveraging theories of message passing in the brain—such as (but not limited to) predictive coding, you will develop next-generation AI models designed to meet the critical demands of healthcare, including improving interpretability. You will develop novel AI algorithms and systems inspired by and using insights from neuroscience for a variety of application domains and problems in machine learning, such as medical image classification, medical image segmentation, medical report generation, and knowledge graph completion. This research belongs in particular to and will be done in collaboration with the researchers of the modules RM6 (Explainable AI) and RM8 (Demonstration and benchmarking) of “Bilateral AI”.

Ihre Aufgaben:

Collaboration on research and teaching tasks as well as examinations

Cooperation and guidance of students

Research and project activity

Writing a dissertation and publications

Participation in scientific events

Assistance/Collaboration in organizational and administrative tasks

Ihr Profil:

Completion of a master or diploma curriculum in one of these fields: computer science, artificial intelligence, or related discipline

Skillful and responsible in experimental work

Experience in the following scientific fields: good (theoretical and programming) background (desirably with published papers) in machine learning and computational neuroscience (desirably in deep learning and neural networks, self-supervised learning, medical image analysis, predictive coding, large language model), as well as good software engineering skills (especially in system implementations and experimental evaluations)

Very good skills in English communication and writing. Knowledge of German (level B2) or willingness to learn it

Interest in research in the field as well as supervision and work with students

Very good communicative skills and team competences and innovative ability

Wir bieten:

A wide variety and exciting range of tasks in a collegial team

Flexibility in working time arrangements

A range of attractive social benefits (see Fringe-Benefit Catalogue of TU Wien)

Wide range of internal and external training opportunities, various career options

Central location of workplace as well as good accessibility (U1/U4 Karlsplatz)

Entry level salary is determined by the pay grade B1 of the Austrian collective agreement for university staff. This is a minimum of currently EUR 3,714.80/month gross, 14 times/year for 40 hours/week. Relevant working experiences may increase the monthly income. We look forward to receiving your application until February 27th, 2025.

Die TU Wien strebt eine Erhöhung des Frauenanteils insbesondere in Leitungsfunktionen an und fordert daher qualifizierte Frauen ausdrücklich zur Bewerbung auf. Bei gleicher Qualifikation werden Frauen vorrangig aufgenommen, sofern nicht in der Person eines gleich qualifizierten Mitbewerbers liegende Gründe überwiegen. Wir sind bemüht, Menschen mit Behinderung mit entsprechender Qualifikation einzustellen und fordern daher ausdrücklich zur Bewerbung auf. Bei Rückfragen wenden Sie sich bitte an die Behindertenvertrauensperson der TU Wien, Herrn Gerhard Neustätter.

Bei Fragen wenden Sie sich gerne an: Carmen Keck | T: +43 1 588 01 406201 Informationen für

Bewerber\_innen finden Sie auch in unserem Karriereportal.

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