The Chair for Machine Learning in Science at the University of Tübingen has an opening for a

Postdoctoral Researcher (m/f/d; E13 TV-L)

to work at the intersection of

Machine Learning and Biogeosciences

Come work with us and use deep learning tools and LLMs to build powerful mechanistic models for fire in regional to global vegetation models. A special focus lies on the impacts of fire-mediated impacts of climate change on vegetation and ecosystem processes as well as potential societal adaptation measures. The project is within the TERRA excellence cluster (www.terra-cluster.org) and a collaboration of the Machine Learning in Science lab (Dr. Cornelius Schröder, Prof. Dr. Jakob Macke) and the Biogeography and Ecosystem Ecology lab of (Dr. Matthew Forrest, Prof. Dr. Thomas Hickler) at the Senckenberg Biodiversity and Climate Research (SBiK-F) Institute in Frankfurt (Main). You will be based in Tübingen, surrounded by a strong ML community, and will have the chance for several short research visits to the SBiK-F to gather relevant knowledge in vegetation models.

Candidate qualifications: We are looking for candidates with a strong quantitative background and a PhD degree in a relevant discipline, ideally in machine learning, numerical simulation, or environmental modelling, and a genuine interest in collaborative and interdisciplinary work at the interface of machine learning and biogeosciences, and strong programming skills (ideally Python and relevant deep learning tools).
While this project will be an interdisciplinary endeavor, no prior knowledge in biogeosciences is mandatory. However candidates should have a strong interest in questions related to biogeoscientific models such as fire, vegetation or climate models and are willing to pick up on relevant topics.

Application: Fixed-term contracts will be until 31st December 2026 with possible extension; starting date is as soon as possible. Employment will be carried out by the central administration of the University of Tübingen.
Please submit your application materials to mls-jobs@inf.uni-tuebingen.de as a single PDF, including a CV with publication list, relevant transcripts, a statement of research interests (max. two pages), contact details of two referees, and a link to a code repository (or work samples). **Please apply before January 31, 2026.** Only complete applications will be considered.

Our groups: We (www.mackelab.org) develop machine learning and AI methods to accelerate scientific discovery. We aim to provide an interdisciplinary, collaborative and supportive work environment which emphasizes diversity and inclusion. In addition to making central contributions to these interdisciplinary projects, positions will offer opportunities for developing your own research program. Working language in the group and institute is English.
In the Biogeography and Ecosystem Ecology lab at SBiK-F we focus primarily on terrestrial vegetation including its dynamics, controls and diversity, and its interactions with the atmosphere, particularly in the context of climate change. We also study the interactions between vegetation and other key forces in the Earth system such as fire, humans and animals. Typically we investigate at regional-to-global scales using process-based models, such as the dynamic global vegetation model, LPJ-GUESS, but also leverage statistical models and data sources such as satellite remote-sensing data and field measurement databases.

Scientific environment: We are embedded in Tübingen's renowned research community in AI, including the Cyber Valley, the Tübingen AI Center, ELLIS, the Excellence Cluster Machine Learning and have strong connections to the new TERRA excellence cluster in geoscience (Terrestrial Geo-Biosphere Interactions in a Changing World). We are situated in the AI Research Building, in close proximity to the Max Planck Institutes, and participate in the two International Max Planck Research Schools (IMPRS) 'Intelligent Systems' and `Mechanisms of Mental Function and Dysfunction'.

Institutional commitment to diversity, equity, and inclusion: The university is committed to equal opportunities and diversity and seeks to raise the number of women in research and teaching. We urge qualified women academics to apply for these positions. Equally qualified applicants with disabilities will be given preference in the hiring process.