



The [Chair for Machine Learning in Science](#) (Prof. Dr. Jakob Macke) at the [Excellence Cluster](#) “Machine Learning: New Perspectives for Science” at the Eberhard Karls University Tübingen has several openings for

Postdoctoral Researchers (m/f/d) (E13 TV-L)
to work at the intersection of
Machine Learning and Computational Neuroscience

funded by the ERC Consolidator Grant “DeepCoMechTome: Using deep learning to understand computations in neural circuits with Connectome-constrained Mechanistic Models“ ([relevant work](#)). The goal of DeepCoMechTome is to develop simulation-based machine learning tools that will make it possible to build neural network models that are both biologically realistic and computationally powerful. In addition to making central contributions to this interdisciplinary project, the positions will offer opportunities and support for developing your own research profile and career.

Candidate qualifications

We are looking for candidates with a strong quantitative background and PhD in a relevant discipline, ideally in computational neuroscience, machine learning or numerical simulation, a genuine interest in collaborative work at the interface of machine learning and neuroscience, and strong programming skills (ideally Python and relevant deep learning frameworks).

Our group

Our research group (www.mackelab.org) develops methods in machine learning and artificial intelligence to accelerate scientific discovery, with a particular focus on neuroscience. We want to understand how brain networks process information and control behaviour, and to use this knowledge to aid diagnosis neuronal dysfunction as well as to inspire new network principles and analysis tools for artificial neural networks. We aim to provide an interdisciplinary, collaborative and supportive work environment which emphasizes diversity and inclusion.

Scientific environment in Tübingen

We are embedded in Tübingen’s internationally renowned research community in artificial intelligence and computational neuroscience, including the Cyber Valley Initiative, the Tübingen AI Center, the ELLIS initiative, the Excellence Cluster Machine Learning, the Bernstein Center for Computational Neuroscience, the Hertie Institute for AI in Brain Health and dedicated MSc Programs in Machine Learning and Computational Neuroscience. We are situated in the AI Research Building, in close proximity to the Max Planck Institutes for Intelligent Systems and Biological Cybernetics, and participate in the two International Max Planck Research Schools (IMPRS) ‘Intelligent Systems’ and ‘Mechanisms of Mental Function and Dysfunction’.

Commitment to diversity, equity, and inclusion

The university seeks to raise the number of women in research and teaching and therefore urges qualified women academics to apply for these positions. Equally qualified applicants with disabilities will be given preference in the hiring process. The university is committed to equal opportunities and diversity. It therefore takes individual’s situation into account and asks for relevant information. The employment will be carried out by the central administration of the University of Tübingen.

Application

Please submit your application materials to mjs-jobs@inf.uni-tuebingen.de, including a CV with publication list, a statement of research interests (max. two pages), contact details of two referees, and a link to a code repository (or work samples). Applications will be scanned on a rolling basis and the positions will be filled as soon as possible. Initial fixed-term contracts will be for 3 years with possible extensions, starting date is flexible. Part-time positions are possible. Hiring is carried out by the Central Administration.