



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

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

We are particularly looking for applicants interested in one of the following three research directions:

1. Using deep learning to build, optimize and study mechanistic models of neural computations, funded by the ERC Grant DeepCoMechTome, e.g., [Lappalainen et al., 2024 \(press release\)](#), [Deistler et al., 2024](#).
2. Machine learning methods for clinical neuroscience, and in particular for analyzing neurophysiological recordings from the human brain, e.g., [Vetter et al., 2024](#); [Kapoor, Schulz et al., 2024](#), [Pals et al., 2024](#), [Liebe et al., 2024](#).
3. Development and application of simulation-based inference for scientific discovery, e.g., [Gloeckler et al., 2024](#), [Schröder et al., 2024](#), [Gao et al., 2024](#).

Candidate qualifications: We are looking for candidates with a strong quantitative background and degrees in a relevant discipline, ideally in machine learning computational neuroscience, 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 tools).

Application: Initial fixed-term contracts will be for 3 years with possible extension, starting date is flexible. Employment will be carried out by the central administration of the University of Tübingen.

Postdocs: Please submit your application materials to mlls-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).

PhD students: Please apply through the [IMPRS-IS](#) and/or the [ELLIS](#) programs. Submit the requested material and indicate your interest in working with us. (**Deadline: Nov 15, 2024**)

Our group: We (www.mackelab.org) develop machine learning and AI methods to accelerate scientific discovery, with a particular focus on neuroscience. 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 pro.

Scientific environment: We are embedded in Tübingen’s renowned research community in AI and computational neuroscience, including the Cyber Valley, the Tübingen AI Center, ELLIS, the Excellence Cluster Machine Learning, the Bernstein Center for Computational Neuroscience and the Hertie Institute for AI in Brain Health. 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’.

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.