



With 6 500 employees in research, teaching and administration and its unique profile, TU Dortmund University shapes prospects for the future: The cooperation between engineering and natural sciencies as well as social and cultural studies promotes both technological innovations and progress in knowledge and methodology. And it is not only the more than 32 400 students who benefit from that.

Doctoral position (m/f/d) - Ref.-Nr. w98-21

This position is available at the Technical University of Dortmund as part of the 6G Research Hub 6Gem. With one of the four German 6G research hubs for future mobile communications technology, there is a unique opportunity to participate in communications design together with a team of top researchers.

The TU Dortmund University, the RWTH Aachen University, the Ruhr University Bochum, the University of Duisburg Essen, as well as the Fraunhofer Institutes FHR, IMS and IML, and the Max Planck Institute for Security and Privacy are jointly and interdisciplinarily investigating methods to increase the quality-of-service in future communication networks.

Our research questions include real-time prediction of channel characteristics, proactive control of mobile networks with quality guarantees, and privacy protection by privacy-bydesign methods.

The position is part of the 6G Hub 6Gem in the Faculty of Computer Science and is initially fixed-term until 31.07.2025. The duration of the contract will be appropriate to the qualification goal. Remuneration is paid in accordance with the collective bargaining regulations according to pay group E 13 TV-L or, if applicable, according to the transitional law (TVÜ-L). This is a full-time position. Employment on a part-time basis or a reduction to part-time is possible in principle.

YOUR QUALIFICATION:

- excellent university degree (Master) in the field of computer science
- basic knowledge in the field of machine learning through attendance of relevant lectures
- Knowledge of reinforcement learning and/or graph neural networks is desirable
- · ideally publications at relevant conferences

YOUR TASKS:

- Research and scientific publishing in one of the focus areas:
 - o Machine Learning and Resource Constraints
 - Safe Reinforcement Learning
 - Imputation and prediction of sensor data
- Participation in transfer to real-world applications

WE OFFER:

- research tasks in one of the most important research areas
 of our time
- cooperation in a team with top researchers at the TU Dortmund and the partners of the research hub
- the opportunity to do a doctorate
- the opportunity for further scientific qualification is given and desired

Applications from people of all genders are explicitly welcome. Applications from women will be given preferential treatment in accordance with legal regulations.

For severe disability to be taken into account, please provide proof in form of appropriate documents.

More information online: https://www.6gem.de/

If you are interested in this position, please submit your application documents, cover letter, curriculum vitae/résumé and certificates/references, by 01/17/2022 using our online application portal: https://karriere.tu-dortmund.de/ or via e-mail (attachments in one pdf-file) to: karriere@tu-dortmund.de

Do you have questions?

Please do not hesitate to contact JProf. Dr. Thomas Liebig by phone +49 (0) 231/755-8117



