Informatik 26 - Data Analytics and Machine Learning
TUM School of Computation, Information and Technology
Technische Universität München

At the Professorship for **Data Analytics and Machine Learning** at the TUM School of Computation, Information and Technology of the Techincal Unviversity Munich (TUM), a position will be available from September 2024 in the DFG project **GeoMAR: Geometric Methods for Adversarial Robustness** as a

PhD Student (f/m/d)

A full-time position is offered for the 3-year project duration.

Your area of responsibility

- Research in the area of robust machine learning. Recent work of our group includes:
  - Robustness of neural networks (https://proceedings.mlr.press/v162/schwinn22a.html)
  - Novel threat models in LLMs (https://arxiv.org/pdf/2402.09063)
  - Efficient Adversarial Training in LLMs (https://arxiv.org/abs/2405.15589)
- Collaboration with the Professorship for Mathematics of Machine learning at the Julius-Maximillian-Universität Würzburg

Your profile

- University degree (M.Sc.) with very good grades in Computer Science or related fields
- Strong background in machine learning
- Strong programming skills in Python and experience with deep learning frameworks (PyTorch or similar)
- Proficient in spoken and written English; German language skills are not required

What we offer

- Salary is according to the level TV-L E 13 of the German public sector (approx. 52.000€ yearly salary)
- Work as part of a research group integrated into the chair of Prof. Stephan Günnemann (TUM)
- Opportunities for international collaborations with the Mila Quebec AI Institute

How to apply

Please send your application (in a single file in pdf format; no links to external files; in English or German) by email to Dr. Leo Schwinn (**l.schwinn@tum.de**; subject: "PhD Application"). The pdf should include **(i)** a brief statement of interest/motivation letter and why you fit to our group (at most half a page), **(ii)** a curriculum vitae, **(iii)** copies of certificates/transcripts, **(iv)** a summary/abstract of the master thesis. Feel free to include in your e-mail body a very short summary of your major achievements (e.g. excellent grades, internships, papers, ...). A list of references (names, contact information) is helpful as well. Applications will be considered as they are received and until the positions are filled. Further information about the chair (https://www.cs.cit.tum.de/en/daml/home/) and myself (https://schwinnl.github.io/)

As part of the Excellence Initiative of the German federal and state governments, TUM has been pursuing the strategic goal of substantially increasing the diversity of its faculty. As an equal opportunity and affirmative action employer, TUM explicitly encourages nominations of and applications from women as well as from all others who would bring additional diversity dimensions to the university’s research and teaching strategies. Preference will be given to disabled candidates with essentially the same qualifications. As part of your application for a position at the Technical University of Munich (TUM), you submit personal data. Please note our data protection information in accordance with Art. 13 of the General Data Protection Regulation (GDPR) on the collection and processing of personal data in the context of your application https://portal.mytum.de/kompass/datenschutz/Bewerbung/. By submitting your application, you confirm that you have taken note of TUM's data protection information.