TU Dortmund University is a dynamic research-oriented university with 17 departments in the natural and engineering sciences as well as social and cultural sciences. On our international campus, around 6,700 employees make a daily contribution to solving pressing questions of the present and the future. Openness and diversity characterize not only the collaboration in research and teaching, but also in technology and administration.

PhD Student or Postdoctoral Researcher

This position is vacant at the Department of Statistics at the newly established Chair of *Computer Intensive Statistics* of Prof. Paul Bürkner, to be filled as soon as possible. The position is full-time (100%) and initially limited to a period of 3 years. Remuneration will be paid in accordance with the German collective wage agreement in pay group TV-L 13.

The candidate will work on developing novel deep learning methods for solving challenging Bayesian inference problems with real-world applications in many quantitative sciences including physics, biology, epidemiology, and neuroscience.

YOUR TASKS:

- Conduct cutting-edge research in the field of deep learning and Bayesian statistics.
- Develop and implement novel statistical methodologies for solving challenging real-world problems.
- Write research papers for publication in top-tier academic journals and conferences.
- Collaborate with other researchers in the group and participate in group meetings and seminars.
- Participate in the undergraduate and graduate teaching of the group (4 SWS).

YOUR QUALIFICATION:

- Master's degree in a field with strong quantitative focus (e.g., statistics, computer science, mathematics, physics).
- Strong interest in research questions focused on statistical modelling of complex data.
- Previous experience in applied statistics, mathematical statistics, or machine learning.
- Ideally previous experience in Bayesian statistics or probabilistic machine learning.
- Previous experience in at least one programming language (e.g., Python, R, Julia, or C++).
- Previous experience in the probabilistic programming languages and deep learning frameworks is an asset.
- Proficient English skills (spoken and written); German skills are not required.

WHAT WE OFFER:

- A dynamic and stimulating research environment with access to state-of-the-art computing resources.
- Collaborate with leading researchers in the fields of Computational Statistics and Bayesian inference.
- The chance to publish research papers in top-tier academic journals and conferences.
- Support for attending scientific conferences.

We promote diversity and equal opportunities. Convince us with your personality and expertise. Applications from women will be given preferential treatment in accordance with the statutory regulations. It is pointed out that the application of suitable severely disabled persons is desired.

Are you interested? Then please send your application (cover letter, CV and references) by 22.05.2023, quoting ref. no. w47-23 to:

Technische Universität Dortmund
Fakultät Statistik
Prof. Dr. Paul Bürkner
Vogelpothsweg 87, 44227 Dortmund

If you have any questions, please contact:

Prof. Dr. Paul Bürkner
E-Mail: buerkner@statistik.tu-dortmund.de