Student Assistant (m/w/d)

Cluster of Excellence SimTech | Stuttgart Center for Simulation Science | At the earliest possible date | 20 hrs/month

The Cluster of Excellence "Data-Integrated Simulation Science" (EXC 2075) is an interdisciplinary research center with more than 200 scientists performing research towards a common goal: We target a new class of modeling and computational methods based on available data from various sources, in order to take the usability, precision and reliability of simulations to a new level.

At our workgroup for Bayesian Statistics at SimTech, we are currently working on topics centered around Bayesian model building and evaluation. The Bayesian approach to data analysis provides a consistent and flexible way to handle uncertainty in all observations, model parameters, and model structure using probability theory. However, building Bayesian models in a principled way remains a highly complex task requiring a lot of expertise and cognitive resources. To this end, we develop a machine assisted workflow for building interpretable, robust, and well-predicting Bayesian models.

You will be part of the team that develops the wide-spread open-source software for Bayesian modeling. After an initial start-up phase, we fully include working students into our development team, where we share common responsibilities, such as coding, code review, software testing (CI), documentation, and user support. We are looking for a long-term commitment. The longer you stay, the more challenging your tasks get and the more freedom you get to decide in which direction the software will develop.

Your tasks:

- Assist faculty members in the development of software, mainly written in R. This will include
  - Writing documentation and tests for the code
  - Participation in the planning and implementation of new features
  - Assisting in finding new approaches for arising challenges

Your qualifications:

- You are studying at the University of Stuttgart in Computer Science, Mathematics, Mechanical Engineering, Physics, SimTech, or similar programs
- Basic software development experience
- Fundamental proficiency in R and Git
- Experience with (Bayesian) statistics could be helpful but is not necessary
- Fluency in English

We offer:

- Insights into the daily routine of research
- Support in the further development of your software development and statistics skills
- The opportunity to get involved and participate in the projects yourself
- An inspirational and supportive work environment in a well-connected research group at the Cluster of Excellence SimTech
- Learn from highly experienced open-source developers
- Work with state-of-the-art software development tools and methods

www.simtech.uni-stuttgart.de
Please submit your complete application (one-page motivation letter, academic CV, degree certificates incl. transcript of records) in **one single pdf file** until **August 31, 2021** via e-mail to Paul Bürkner (paul-christian.buerkner@simtech.uni-stuttgart.de). If you have any questions, do not hesitate to contact us.

The University of Stuttgart is an equal opportunity employer. We highly encourage applications from underrepresented groups, explicitly (but not exclusively) first-generation students, women, immigrants, parents, POC, LGBT*IQ. Severely challenged persons will be given preference in case of equal qualifications.

As an employer, the University seeks to support the development of all its employees and helps them fulfil their individual potential. It advocates a good work/life balance and equal opportunities. The University of Stuttgart is a recognized “family-friendly employer” and a signatory to the Diversity Charter (“Charta der Vielfalt”) created by German organizations to promote diversity in business and society.

Information on the collection of personal data in accordance with Article 13 of the GDPR can be found via the following link: [www.uni-stuttgart.de/en/privacy-notice/job-application](http://www.uni-stuttgart.de/en/privacy-notice/job-application).