

Working Student/HiWi Position in Software Development for Multi-Physics Multi-Scale Simulations (m/w/d)

Cluster of Excellence SimTech | Stuttgart Center for Simulation Science | At the earliest possible date
| 10 hrs/week

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 to take the usability, precision, and reliability of simulations to a new level. The open working student position is part of the SimTech Project Network 5: <https://www.simtech.uni-stuttgart.de/exc/research/pn/pn5/>

You will be part of the team that develops the wide-spread open-source coupling library preCICE (<https://www.precice.org/>). 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. To give you an impression, here is a recent contribution by a working student: <https://github.com/precice/precice/pull/881>. 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 preCICE will develop. Most of the current doctoral candidates in the team started as working students.

Your tasks

- Software development on various levels: writing issues, coding, code review, testing, support, ...
- Developing new test cases for multi-physics multi-scale applications
- Active participation in discussions of the preCICE community and events such as workshops and coding days

Your qualifications:

- You are studying at the University of Stuttgart in Computer Science, Mathematics, Mechanical Engineering, Physics, SimTech, or similar programs
- Good knowledge of at least one programming language (e.g. C++, Python, or Fortran)
- At least basic knowledge of Git
- Ability to work independently and as part of a team
- Fluency in English

We offer:

- Visible contribution to a widely used open-source research software
- An inspirational and supportive work environment in a well-connected research group at the Cluster of Excellence SimTech
- A steep learning curve
- Work with state-of-the-art software development tools and methods

Please submit your complete application (one-page motivation letter, academic CV, degree certificates incl. transcript of records) in **one single pdf file** until **April 19, 2021** via e-mail to Ishaan Desai (ishaan.desai@ipvs.uni-stuttgart.de). If you have any questions, don't hesitate to contact us.

Information on how we handle applicant data in accordance with Article 13 of the EU General Data Protection Regulation can be found at <https://www.uni-stuttgart.de/en/privacy-notice/job-application/>.

The University of Stuttgart is committed to increasing its female-to-male staff ratio. Female candidates are therefore specifically invited to apply. Where qualifications are equal, persons with a severe disability will be given preference. 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.