## Job advertisement

Vacancy ID: 387/2021 Closing date: 15.12.2021



Friedrich Schiller University is a traditional university with a strong research profile rooted in the heart of Germany. As a university covering all disciplines, it offers a wide range of subjects. Its research is focused on the areas Light—Life—Liberty. It is closely networked with non-research institutions, research companies and renowned cultural institutions. With around 18,000 students and more than 8,600 employees, the university plays a major role in shaping Jena's character as a cosmopolitan and future-oriented city.

The Faculty of Mathematics and Computer Science seeks to fill three positions

# PhD/Postdoc in Computational and Data Science (m/f/d)

starting January or later. The full-time positions (40 hours per week) are initially limited to three years.

The three groups Advanced Computing, Scalable Data- and Compute-intensive Analyses, and Scientific Computing cooperate in research and teaching. We tackle interdisciplinary applications and computationally demanding challenges in academia and industry. Our work covers fully automated production workflows by integrating mathematical modeling and numerical simulation, high-performance computing, software engineering, and data analytics. This overarching approach is crucial for building visionary, transferable, robust and efficient software pipelines.

#### Your responsibilities:

- Harness some of the largest supercomputers in the world and work on emerging microarchitectures, which will shape the future of high-performance computing
- Work on innovative software and algorithms as part of multidisciplinary production workflows
- Propose novel approaches for simulation and data sciences, and discuss them with partners in academia and industry
- Share your solutions with the research community through a variety of outlets
- Support teaching activities in Computational and Data Science at all levels
- Contribute to the design of state-of-the-art courses by integrating your own research experiences
- Work on your scientific qualification, e.g., your doctorate or habilitation

## Required qualifications:

- Master's/Ph.D. degree in Computational and Data Science, Computer Science, Mathematics or a related field
- Knowledge in numerical algorithms and data analytics
- C / C++ skills and a passion for writing high quality code
- Willingness to expand your expertise to new and project-relevant areas
- · Strong verbal and written communication skills
- Willingness to work in a dynamic and team-oriented environment



### **Desired qualifications:**

- Experience in parallel programming and hardware architectures
- · Python skills including interfaces to C/C++
- Experience with machine learning/deep learning frameworks and libraries
- Experience with good software engineering practices

#### We offer:

- A Graduate Academy for doctoral candidates and postdocs
- A family-friendly working environment with a variety of offers for families: University Family Office 'JUniFamilie' and flexible childcare ('JUniKinder)
- · University health promotion and a wide range of university sports activities
- Attractive fringe benefits, e.g. capital formation benefits (VL), Job Ticket (benefits for public transport), and an occupational pension (VBL)
- Remuneration based on the provisions of the Collective Agreement for the Public Sector of the Federal States (TV-L) at salary scale E13 — depending on the candidate's personal qualifications—, including a special annual payment in accordance with the collective agreement

Candidates with severe disabilities will be given preference in the case of equal qualifications and suitability.

Submit your detailed written application (cover letter, curriculum vitae in tabular form, certificates), stating the vacancy ID 387/2021 by 15.12.2021 to:

Friedrich-Schiller-Universität Jena
Fakultät für Mathematik und Informatik
Institut für Informatik
Prof. Dr. Alexander Breuer (alex.breuer@uni-jena.de)
Fürstengraben 1
07743 Jena, Germany

Since all application documents will be duly destroyed after the recruitment process, we ask you to submit only copies of your documents.

For further information for applicants, please also refer to <a href="www4.uni-jena.de/stellenmarkt\_hinweis.html">www4.uni-jena.de/stellenmarkt\_hinweis.html</a> (in German) Please also note the information on the collection of personal data at <a href="www4.uni-jena.de/en/jobs\_information\_collecting\_personal\_data.html">www4.uni-jena.de/en/jobs\_information\_collecting\_personal\_data.html</a>