

**Are you looking for a new professional challenge?  
Then this is the place to be!  
Become part of our international team!**



August 8<sup>th</sup> 2024

The Zuse Institute Berlin (ZIB) is a non-university research institute under the public law of the state of Berlin. Within the research group “Computational Diagnosis & Therapy Planning” of the department “Modelling and Simulation of Complex Processes” we are offering a position for a

**Computer Scientist (f/m/d)**  
**Reference Code: WA 30/24**  
**Pay grade E13 TV-L Berlin – 100%**

With an opportunity to start at the earliest possible date, this vacancy offered is a fixed-term contract for the duration of the project which was approved for a 3-year funding period.

### **Background**

We are looking for a research assistant for a sub-project in an interdisciplinary research unit funded by the German Research Foundation (DFG FOR 2804), in which clinicians, material scientists and computer scientists are jointly researching the improvement of dental restorations. Within the sub-project, causes for failures in root canal treatment are to be investigated with the help of high-resolution 3D imaging techniques, image analysis, morphological analysis, and machine learning. Based on specimen prepared ex-vivo by clinical partners, common patterns of failures are to be identified and correlations between treatment parameters, root morphology, and failures are to be investigated.

### **Job description**

- Independent research and development on the above-mentioned topic
- Development, implementation, testing, and application of innovative approaches according to the scientific state of research
- Active interdisciplinary cooperation with project partners
- Participation in project management and project coordination
- Goal-oriented scientific work
- Publication of results in conference papers and journal articles

You will work in a team of scientists and can benefit from experience and scientific exchange. A connection between the project work and a doctoral project is desired and supported.

## Your profile

- University master's degree in computer science, mathematics or comparable subjects
- Programming experience preferably in C++ or Python and daily use of Linux
- Strong interest in application-oriented, interdisciplinary research and practical implementations
- Knowledge in image processing and data analysis
- Interest in large data image processing – segmentation, registration, and machine learning
- Interest in geometry processing and morphological analysis
- Interest in parametrization/flattening/dimension reduction and scientific visualization
- Very good knowledge of the English language

## Additionally, you have

- excellent teamwork and communication skills,
- a high degree of independence and commitment as well as
- the ability and willingness to write scientific publications on an international level.

**We are offering** an active onboarding process to provide new employees with the skills and knowledge that are important for their success in our institute and their career. We offer a family-friendly working environment through flexible working and meeting hours

## as well as

- comprehensive training in a competent and cooperative team,
- an additional pension scheme (VBL),
- 30 days annual leave, additionally free from work on December 24th and 31st,
- compatibility of work and family through flexible working hours, e.g. (flexitime),
- a salary in accordance with TV-L (Collective Agreement for the Public Service of the Federal States), taking into account the relevant professional experience,
- an allowance of up to €150 per month, alternatively a discounted BVG (public transport) ticket + difference amount,
- an end-of-year bonus
- and the use of canteens and sports programs of the Freie Universität Berlin (FUB) at reduced rates.

Although this position advertised is full-time, a part-time agreement is also possible.

Female applicants are highly encouraged to apply. Since women are underrepresented in information technology, the ZIB is trying to increase the proportion of women in this research area.

Applicants with disabilities will be given preference if equally qualified.

Please send your application, quoting the reference code **WA 30/24**, including a cover letter containing a statement of your research interests, your CV and the standard supporting documents as **one PDF file** by September 22<sup>nd</sup> 2024 (date of receipt) to: [jobs@zib.de](mailto:jobs@zib.de).

Our private policy statement regarding application data is available at [www.zib.de/impressum](http://www.zib.de/impressum).

For further information on the area of responsibility, please contact Dr. Stefan Zachow ([zachow@zib.de](mailto:zachow@zib.de)).

For further job offers please visit our website at <https://www.zib.de/jobadvertisement>.