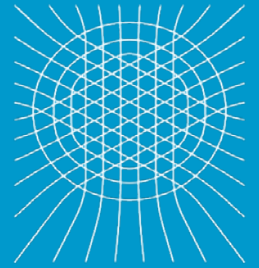


**Are you looking for a new professional challenge? Then this is the place to be!
Become part of our international team!**



ZIB

January 7, 2021

The Zuse Institute Berlin (ZIB) is a non-university research institute under public law of the state of Berlin. Within the division of Mathematics for Life and Materials Sciences, the research group Computational Diagnosis and Therapy Planning is offering a

Research position (m/f/d)
Reference code: IWA 01/21
Pay grade: E13 TV-L Berlin (100%).

This vacancy can be filled at the earliest possible date and is a fixed-term contract until December 31, 2024.

As part of a collaborative research center funded by the DFG we will investigate in close interdisciplinary collaboration with the Charité Berlin and the Julius-Wolff Institute, interfragmentary motion, forces and loading conditions within the context of human fracture healing.

Your tasks

- geometric 3D modeling of anatomical structures and implants
- medical image analysis (CT, X-ray, fluoroscopy)
- model-image registration and analysis of motion patterns
- simulation of mechanical loading in bone models and evaluation of simulation results based on in-vivo measurements in view of an optimization of fracture treatments
- developing software tools for treatment planning and decision support with the help of machine learning

Your profile

- Master Degree in Computer Science, Physics, Mathematics or a comparable discipline
- strong interest in biomechanics, image analysis, modeling and machine learning
- strong interest in application-oriented research within the domain of medicine
- knowledge of medical image analysis and tissue mechanics
- programming experience - preferably in C++ and Python
- good communication skills, both within the project group and with the project partners
- ability to prepare structured reports and scientific publications in English
- ability to work independently and goal-oriented within an interdisciplinary team

We also expect creativity as well as a strong commitment to the project. Working on a project-related dissertation topic is possible and would be supported by us.

We offer a friendly working atmosphere with flexible work and meeting times, excellent equipment and a challenging professional environment

as well as

- comprehensive training in a competent and cooperative team
- an additional pension scheme (VBL)
- 30 days annual leave, flexible working hours (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 end-of-year bonus
- discounted BVG (public transport) company ticket
- and the use of canteens and sports programs of the Freie Universität Berlin at reduced rates.

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 **IWA 01/21**, including cover letter containing a statement of your research interests, CV with a list of publications, academic transcripts and contact details of two references by **January 15, 2021** (date of receipt) to

Zuse Institute Berlin (ZIB)

- Administration -

Takustr. 7

14195 Berlin

or by email in pdf format to: jobs@zib.de

Our private policy statement regarding application data is available at www.zib.de/impressum.

For further information about the position, please refer to our website www.zib.de or contact Dr. Stefan Zachow (zachow@zib.de).

For further job offers please visit our website at www.zib.de/jobads.