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

ZIB

13.02.2020

The Zuse Institute Berlin (ZIB) is a non-university research institute under public law of the state of Berlin. Within the Mathematics for Life and Material Sciences, the department of Numerical Mathematics, research groups Computational Nano Optics and Computational Medicine, is offered at the earliest possible date until March 31st, 2023 (end of project).

two research positions (m/f/d)
reference code: WA 11/20
pay grade E13 TV-L Berlin (100%)

Within a research project funded by the BMBF, successful candidates will develop and analyze methods for efficient simulation of training data for machine learning aimed at optical metrology and semiconductor manufacturing.

Your tasks

- developing and implementing active learning strategies based on simulations
- developing error estimators and optimal allocation strategies
- integration of simulation results and measurement data
- modeling and simulating optical metrology problems
- optimizing masks using surrogate models
- evaluating the efficiency of developed methods

Your profile

- a master degree in mathematics, physics, or similar discipline
- strong interest in numerical simulation methods and machine learning
- knowledge of finite element methods, optimization methods, or machine learning
- programming skills preferably in C++ and Matlab or Python
- excellent communication skills within the project group as well as with industry partners
- ability to work independently and goal-oriented

We also expect creativity and commitment to the project. Pursuing a project related PhD is possible and desirable.

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

as well as

- a comprehensive training in a competent and cooperative team,
- additional pension scheme (VBL),
- 30 days annual leave, flexible working hours (flexitime),
- payment in accordance with TV-L (Collective Agreement for the Public Service of the ferderal states), taking into account the relevant professional experience and annual special payment

- as well as the discounted use of canteens and the sports program of Freie Universität Berlin.

The candidature of women is encouraged. Since women are underrepresented in information technology, ZIB is trying to increase the proportion of women in this research area.

Persons with disabilities will be given preference when equally qualified.

Please send your application, quoting the reference code **WA 11/20**, including CV in tabular form and all relevant documents, by **March 16st, 2020** (date of receipt) to

Zuse Institute Berlin (ZIB)
- Administration -
Takustr. 7
14195 Berlin

or electronically as pdf-form 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. Martin Weiser (weiser@zib.de) or Dr. Sven Burger (burger@zib.de).

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