Open position at the Chair of Practical Computer Science / Software Systems Engineering in the Faculty of Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology at the Brandenburg University of Technology Cottbus–Senftenberg:

The Brandenburg University of Technology Cottbus-Senftenberg (BTU) is a young, ambitious university and the only technical university in the state of Brandenburg. With more than 1,500 employees, the BTU is one of the largest employers in Lusatia and offers excellent compatibility of family and work.

Research and teaching fellow (m/f/d) (Qualification position)
temporary for the duration of 4 years, full-time, E13 TV-L

Reference Number: 38/22

The construction of high-quality software & systems in the age of digitalization requires a comprehensive approach. The Software Systems Engineering chair is therefore engaged in researching & teaching techniques, which allow for handling the increasing complexity and size of modern software systems and increase their overall quality. Our future core application area is field of medical informatics. Especially in this area, numerous different types of software and systems have to be integrated. Moreover, various quality criteria must be systematically balanced, integrated and continuously checked.

These are your responsibilities:

Teaching:
- Participation in the fulfillment of teaching tasks at the chair for the courses in Computer Science, Information and Media Technology and Cyber Security as well as other thematically related courses. Teaching of specialized knowledge, practical skills and instruction in the application of scientific methods
- Preparation, execution and follow-up/evaluation of exercises and practical courses
- Assistance in the preparation of lectures and seminars as well as other teaching-related administrative tasks
- Development and maintenance of teaching materials and assignment collections
- Preparation, execution and evaluation of oral and written examinations
- Participation in the supervision of student research projects and theses

Research:
- Scientific work related to one or multiple main research areas of the chair:
  - Automated software testing and analysis
  - Domain-Specific Languages
  - Formal methods in software engineering (especially graph logic & graph transformation)
  - Model-driven techniques for software design and analysis
  - Software quality
  - Software architectures
- In particular, participation in the preparation and implementation of externally funded projects
- Publication and presentation activities, preparation of contributions for reports and presentations

You will apply your research to use-cases from the medical informatics. You will evaluate your research in realistic experimental setups (either jointly or individually developed) in the Laboratory for Software Quality (available at the chair in Q2 of 2022).
**Your Skills:**
You have successfully completed a scientific university degree within the context of the TV-L pay scale (accredited Master's degree / university diploma / equivalent) in a field relevant to the position (Computer Science or comparable).

You already have knowledge and experience in one or more of the above-mentioned research areas of the chair.

You have the ability to work scientifically, independently, and flexibly. You possess good communication skills. The capability to think analytically as well as to work in a structured and creative manner, makes you an ideal addition to our team.

**Our Offer:**
- Collaboration with an international team with relevant experience in research and teaching in software quality
- The opportunity for direct exchange with partners from Industry, especially in the field of medical informatics
- Modern infrastructure and creative learning environment, especially through the application and evaluation of the investigated techniques in the Laboratory for Software Quality. The possibility to deepen and broaden your expertise in modeling and formal methods for software engineering
- Extensive opportunities for flexible working hours & Home-Office to enable an adequate work-life balance via more direct responsibility in the organization and execution of your work.

Become a part of the BTU family. We look forward to getting to know you.

For further information about the position, please contact Prof. Dr. Leen Lambers (E-Mail: leen.lambers@b-tu.de, Tel.: +49 (0)355 69-3880)

The BTU Cottbus-Senftenberg is committed to equal opportunities and diversity and strives for a balanced gender ratio in all employee groups. Persons with a severe disability as well as persons of equal status will be given priority in the case of equal suitability. The BTU aims to increase the proportion of women in research and teaching and therefore strongly encourages qualified female applicants to apply.

The submission of application photos is not required.

Please note the more detailed information on the selection process on the BTU Cottbus-Senftenberg website.

Please send your application documents quoting the reference number, exclusively by e-mail, in a single PDF document to the Dean of Faculty 1 MINT - Mathematics, Computer Science, Physics, Electrical Engineering and Information Technology, Brandenburg University of Technology Cottbus-Senftenberg, E-Mail fakultaet1+bewerbungen@b-tu.de by 12.04.2022.