Postdoctoral Researcher Core Informatics Helmholtz Pilot Program: KiKIT - Core Informatics at KIT Karlsruhe

The Karlsruhe Institute of Technology (KIT)

The Karlsruhe Institute of Technology (KIT) is one of the largest research institutes in Germany. It was founded in 2009 from the merging of the University of Karlsruhe and the Karlsruhe Research Center. The Institute offers a wide range of study programs in the fields of natural sciences, engineering, economics and humanities. With its strong focus on research and innovation, KIT is one of the leading technical universities in Europe.

Workplace at the Helmholtz Joint Research Project

The Helmholtz Association has recently established a pilot program at KIT to bring core informatics, meaning research on generic (but application-oriented) methods of informatics, into the focus of Helmholtz research. As a research university in the Helmholtz Association with a large and leading computer science department, KIT is particularly well positioned to pursue this goal.

Task Definition

In this research line it is studied how formal refinement approaches are qualified to handle the complexity of sophisticated models in a modular and collaborative way.

By using different formal techniques and abstractions, different approaches will be integrated to achieve better verification results and the development of more reliable systems, with a particular focus on cyber-physical systems (CPS).

Education & Qualifications (m/f/d)

- You have a PhD in a relevant field: computer science, software engineering, systems engineering or a related discipline
- You have a solid background in formal methods, with expertise and research experience in areas such as formal specification and modeling, program verification, refinement methods, logic and deduction, or formal methods in software engineering
- You have a solid research and publication record in formal methods, software engineering, algorithmics or a related field
- You have a strong commitment to research: independent work ethic and a proven ability to work independently and in teams on challenging research questions
- Project management and leadership skills: experience in managing research projects, coordinating research activities and supervising junior researchers or students is an advantage
- You have excellent communication skills, both written and verbal
- Good command of English, knowledge of German is of advantage

Contract Offer

- Full-time employment at KIT with a competitive fixed salary
- An excellent working environment in a dynamic and internationally recognized research group
- The contract is initially limited to two years with options for extensions (to a maximum of 6 years)

You will benefit from a position at the KIT:

- Graduate school within the CRC Convide
- Access to a network of leading researchers, computer scientists and engineers
- Opportunities to collaborate in interdisciplinary teams working on complex software-intensive technical systems

We're looking forward hearing from you. Interested?

Please Send us your CV and letter of motivation in German to personalberatung@kontrast-gmbh.de. We'll contact you for further details. Our service for you is for free!



 $Please \ Send \ us \ your \ to \ personal be ratung@kontrast-gmbh.de.$ Kontrast Personalberatung GmbH • Banksstr 6 • 20097 Hamburg

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