




## PhD Position

(full-time, 3 years, extension is possible, TV-L E13, completing a PhD thesis is expected, Location: Clausthal-Zellerfeld)

## Requirements, Architecture and Lifecycle Engineering

 Institute for Software and Systems Engineering

### Person in Charge

Prof. Dr. Andreas Rausch  
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Requirements, Architecture and  
Lifecycle Engineering

Institute for Software and Systems  
Engineering (ISSE)

Technische Universität Clausthal

### Contact Person

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### OUR RESEARCH GROUP

In the research group „Requirements, Architecture and Lifecycle Engineering“ we focus on engineering approaches for the design and development of open and adaptive software systems. Our excellent regional, national and international networks generate a perfect steppingstone and point of entry to careers in science or industry.

Our research interests include:

- Managed evolution of software systems
- Adaptive and dependable component-based software architectures
- Model-based Engineering
- Managing emergent behavior in systems
- Service Composition approaches
- Software Product Line Engineering
- and much more

### YOUR PROFILE

- Diploma or master's degree in computer science (preferred)
- Outstanding and successful university education results
- Ability to work independently and in a structured manner and quick to grasp new concepts
- Interest in scientific work in a cross-domain context
- Good skills in software development and in modeling architectures of software and systems
- Expert-knowledge in Java or C++
- Good knowledge of the object-oriented approach and of UML
- Proficient in German or English, in spoken and written form

### YOUR TASKS

- Development of an emergent framework for IT ecosystems
- Using DevOps approaches in the field of management systems for smart energy devices
- Development of specific requirements for system design
- Development of concepts for architectures related to open and adaptive software systems
- Formalizing of domain-specific models
- Working on demonstrators to show the application maturity of self-developed methods
- Publication of own results in academic research at conferences
- Assistance in preparation of lectures and active participation in teaching classes and teaching students

### WE OFFER

- A family-friendly and collegial work environment in dedicated teams as well as interdisciplinary and with varied range of tasks
- The opportunity to develop innovative approaches independently
- Evaluating your research results directly in industrial projects
- The opportunity to do a doctoral degree in cooperation with research institutions and companies in Germany and abroad
- Flexible working hours
- Regular training and further education
- Salary according to TVL-E13, including special annual payment as part of the TVL
- Lounge Lab, kicker and coffee

Please send your application (in German or English) with usual documents referring the number 2021/ENG-DevOpt until 31.10.2021 via email to [christoph.knieke@tu-clausthal.de](mailto:christoph.knieke@tu-clausthal.de)