

Thesis
B.Sc.

Thesis
M.Sc.

IDP, HiWi,
Guided
Research

DevOps of a Modern, Web-Based Application

Motivation

Since 2015 our Chair is using a semi-automated management system for student theses called *Chairman*. Chairman facilitates our daily routine by keeping track of the numerous students working on their theses, by acting as a central collection of the written results of our students and by distributing templates and information to our students.

Lately, we created a prototype of a new, more modern and comfortable, web-based Chairman 2.0 application^a. Chairman 2.0 is based on modern web-technologies, namely microservices on server-side (implemented in Spring Boot/Java) and a single-page application on client-side (implemented in Angular/JavaScript).

The current status of the implementation is that we have a working prototype but we did not deploy this service into production yet. Furthermore, there are some open issues that require thorough research.

^a<https://www.net.in.tum.de/fileadmin/bibtex/publications/theses/2018-mauerer-ma.pdf>

Your Task

Depending on your personal intentions and interests we can either define a HiWi job or define research questions for a student research topic. For students who intend to do their Bachelor's or Master's thesis, IDP, GR, etc. on this subject we also offer accompanying HiWi positions. So this project might offer you some financial income, a nice topic for a student project, and finally you can acquire skills in modern web development and system administration.

The primary focus of the HiWi job is the deployment of the prototype into a production environment and its stable operation. For student research topics we can offer questions targeting security, accountability and trustworthiness of the Chairman system.

You should bring some background knowledge in system administration, Java, Spring Boot, etc.

Contact

Dr. Holger Kinkel kinkel@net.in.tum.de
Marcel von Maltitz vonmaltitz@net.in.tum.de

<http://go.tum.de/718502>

