

# **Thesis**



## Analysis and implementation of a plug-in system in C++

### **Background:**

At the Institute for Applied Materials - Microstructure Modeling and Simulation (IAM-MMS) at KIT, a desktop application based on Qt called KadiStudio is being developed as part of the development of a research data infrastructure (Kadi4Mat). This application allows various software units to be loaded and executed as plugins.



#### Your Task:

Within this work, a suitable alternative for the existing plug-in loading system developed at the Institute is to be found and implemented. For this purpose, a requirements analysis is to be created first, then existing third-party solutions are to be researched and compared, and finally the most suitable solution is to be implemented. The aim is to simplify the development with the plug-in loading system and to implement missing use cases.

## **Prerequisites:**

Basic knowledge of C++, Qt and Linux is advantageous for working on this topic.

## We provide:

- intensive supervision
- modern work stations and high performance computers as work environment
- productive and dynamic atmosphere in a team
- cooperations with international research groups
- career options as junior scientist

#### **Curious?**

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