

The Knowledge Engineering group offers the following diploma or master's thesis topic in cooperation with SAP Research:

Creating a Developer's Tool for UI Composition

Developing user interfaces from existing UI components is a promising approach for saving programming time. Formal models and rules can be used to further speed up the UI development process and allow dynamic composition of user interfaces at run-time.

At SAP Research, we have developed a framework for run-time composition of user interfaces, based on formal ontologies and logic rules. Currently, those ontologies and rules have to be hand-crafted by the developers integrating the new UI. This is a process which requires a lot of additional knowledge and is rather error-prone.

In your thesis, you will develop a tool which supports developers in composing user interfaces from existing components. Your focus will be on finding suitable graphical representations for creating and editing the required ontologies and rules, and implement a tool which allows for automatically defining integration rules. This tool will later be used by developers for efficient user interface composition.

We offer a great and team oriented working environment, the possibility to extend your practical experience and theoretical knowledge within a team of university and industrial researches. Guided by mentors from SAP's research team and the Knowledge Engineering Group at Darmstadt University, you will be supported throughout the work on your thesis and encouraged to work on your own initiative, to develop new ideas. Successful candidates will get a contract for six month with fair payment.

Your profile

Knowledge and interest in the following fields:

- Java/Eclipse
- Semantic Web and Ontologies
- User Interfaces

Good level of English as well as German (written and spoken) required.

Contact

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