Final Thesis:

Index-Structures for Semantic Faceted Search

→ Background
The increasing amount of data on the Web bears potential for addressing complex information needs more effectively. Instead of keyword search and browsing along links between results, users can specify their needs in terms of complex queries and obtain precise answers right away. Particularly in cases where the information need is fuzzy, browsing is useful for exploring the data. Faceted search allows users to browse along facets. However, in a semantic web context our facet (and facet value) definition is more fine grained, when compared to a traditional Information Retrieval scenario. This leads to a massive amount of facets (and values), resulting in existing infrastructure solutions for a faceted search engine being not suitable any longer.

→ Goal
Goal is to extend an existing implementation – the so-called Information Workbench (see http://iwb.fluidops.com) – to support the novel index structures and evaluate their performance wrt. existing solutions. However, note, the Information Workbench is currently developed together with Fluid Operations and used by their customers. Thus, this thesis would have a clear impact and an implementation could be used by major industry partners.

→ Requirements
Basic knowledge of semantic and database technologies as well as advanced Java skills are required.

For further information, please contact:
Andreas Wagner
a.wagner@kit.edu
Forschungsgruppe Wissensmanagement
Institut AIFB