**PhD position (f/m/d) in cooperation with SAP:**
**SAP Analytics Cloud - Optimization Enhancements and Uncertainty Considerations**

**Job description:**
SAP Analytics Cloud (SAC) in its current form provides quantitative support to businesses in terms of reporting, visualization and forecasting. However, systematic support based on prescriptive models for these decisions is missing in the current SAP Analytics Cloud infrastructure. The goal of this research project is therefore to identify return-oriented mathematical models and solution methods for optimization under data uncertainty and to find a way for these models to take advantage of the comparatively good data situation prevailing in SAC to better support strategic decisions. The resulting data and optimization models should allow decision options to be visualized and evaluated according to the uncertain data situation. The models and methods found should then be used to fill the gaps that currently exist in the SAP Analytics Cloud for prescriptive planning in the strategic area. The methodological enhancements of the planning module will be developed after the identification of cross-industry commonalities of revenue-oriented planning at different planning levels and evaluated on a selection of companies from different industries using the existing database of the SAP Analytics Cloud with the help of prototype implementations. In perspective, the method portfolio of the SAP Analytics Cloud can then be expanded to include these models.

**Qualification:**
Prerequisite is a degree in mathematics, statistics, computer science or a related field of study with reference to analytics, statistics, operations research or optimization theory. Applicants should have sound knowledge and strong interest in the areas of optimization, mathematical programming, and statistics. In addition, good programming skills are expected. Experience or knowledge of software systems for configuration, planning and control of enterprise applications is advantageous.

**Salary:**
The remuneration occurs on the basis of the wage agreement of the civil service in TV-L E13.

**Institute:**
Institute for Operations Research (IOR)

**Contract duration:**
36 months

**Starting date:**
As soon as possible

**Application up to:**
15.05.2021

**Contact person in line-management:**
For technical details please contact Prof. Stefan Nickel (stefan.nickel@kit.edu, +49 721 608-43381). Further information on our research groups can be found at: www.ior.kit.edu.
Application:

Please send your application including a cover letter, your CV, and all certificates/references in electronic form to: Prof. Stefan Nickel, stefan.nickel@kit.edu.

We prefer to balance the number of female and male employees. Therefore, we kindly encourage female applicants to apply for this job.

Recognized severely disabled persons will be preferred if they are equally qualified.

KIT is certified as a family-friendly university (familienfreundliche Hochschule) and offers part-time employment, leaves for family-related reasons, dual career options, and individual coaching for family-work balance.