

# PhD Student (f/m/d) - Price Calculation & Forecast



Software-Research

## PURPOSE AND OBJECTIVES

The Cloud Architecture and Engineering (CAE) Unit within the Global Cloud Services (GCS) organization is looking for a PhD candidate in the research area of mathematical optimization to optimize SAP's Cloud Infrastructure and increase its utilization and reliability. The successful candidate will perform research with a highly visible academic partner and transfer the results into a world spanning industry scale cloud infrastructure.

We are currently extending our research and innovation team to transform our automation framework to be future proof for the increasing demand on SAP cloud offerings. We are working on concepts to modernize our system architecture to be scalable, performant, and reliable by leveraging state of the art virtualization technology (e.g., containerization, K8S).

## EXPECTATIONS AND TASKS

In GCS innovation office we are looking for a hands-on and self-driven PhD student to explore cost models for hyperscaler offers. Within our team we are focused to optimize cloud utilization within internal hardware resources as well as hyperscaler resources. For our optimization process one topic of interest is the cost structure of hyperscaler offers.

The work would include data gathering, data unification of hyperscaler cost data and the development of an overall pricing model. Learning new skills together with the willingness to grow into new technical areas is very important for a successful PhD.

## EDUCATION AND QUALIFICATIONS / SKILLS AND COMPETENCIES

- *Master's in informatics, business informatics, business, or related field with scientific interest regarding a unified pricing model for hyperscalers/hardware resources in which the dissertation will be written*
- *Strong programming skills in Python*
- *Data crawling/scraping skills*
- *Strong oral and written English skills are essentially*
- *Ability to focus and work independently*
- *Experience in Data science topics, data cleaning and data modelling is a plus*
- *Experience with forecasting methods is a plus*
- *Experience with hyperscaler cost data is a plus*

*Your set of application documents should contain a cover letter, a resume in table form, school leaving certificates, current university transcript of records, copies of any academic degrees already earned, and if available, references from former employers (including internships). Please describe as well your experience and skills in foreign languages and computer programs/ programming languages.*

*#PhD #Doktorand #Germany #Deutschland #Student*

## WORK EXPERIENCE

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## IMPORTANT NOTE

The positions are approved by the university as well as the supervising professor.

## LOCATION

Rot, Germany

## WORK AREA

**Software-Research**

## EXPECTED TRAVEL

10-20 %