

HPI Colloquium

05.11.2020, 4.00 pm

Hasso-Plattner-Institut, Hörsaalgebäude, Hörsaal 1
and via tele-TASK and Zoom
Campus Griebnitzsee, 14482 Potsdam

“Data-Driven Decision Support for Enterprise Applications”

Dr. Rainer Schlosser
Postdoctoral Researcher

Abstract

In many businesses, the number and frequency of operational decisions to be made has increased. Further, a competitive decision-making requires a comprehensive analysis of more and more data and cannot be managed manually anymore. Hence, in recent years, the need for automated decision-making has become highly relevant. As current decision support systems, which are typically rule-based, perform far from optimal more sophisticated decision support has an enormous potential. The vision is to use self-tuning systems that are based on data-driven optimization models providing highly effective decisions. Naturally, to derive such solutions is challenging as in practical applications decisions typically have (i) a non-deterministic impact, (ii) mutually influence each other, and (iii) have to be managed according to different short- and long-term goals in changing environments. In this talk, Rainer Schlosser will give a brief overview about his research on data-driven decision making and his focus on applications in the areas of revenue management and database tuning. He will present deep dive examples for both research areas and discuss future research directions towards robust and self-tuning decision support.

Short CV

Rainer Schlosser studied mathematics and business administration at Humboldt University of Berlin with a focus on optimization, stochastics, and quantitative methods. He worked as a research assistant at the Institute of Operations Research at HU Berlin. In 2014, he received his Ph.D. in operations research where he focused on dynamic optimization problems. In 2015, he joined the Hasso Plattner Institute working at the EPIC research group of Prof. Plattner where he specialized on data-driven decision support. He has taught methods of operations research at HU Berlin and data-driven decision-making at HPI. Dr. Schlosser has over 40 peer-reviewed publications in reputable international journals and conferences of different fields, such as operations research, economics, and data science (e.g., EJOR, JEDC, KDD) as well as database research (e.g., ICDE, VLDB, SSDBM, DAPD). Further, he serves as a reviewer for more than 30 journals.

Host: Prof. Dr. habil. Katharina Hölzle, MBA