The Data Driven Decisions (D^3) Group at the University of Würzburg is dedicated to the development and application of new methods that exploit large amounts of empirical data to arrive at better decisions in various fields of management, e.g., in Retail, Supply Chain and Operations Management, Healthcare, Smart Cities, Energy and Mobility. The D^3 Group currently consists of 15 researchers, has a strong international focus and is affiliated with the newly created cross-faculty Center for Artificial Intelligence and Data Science (CAIDAS) of our university.

As part of the D^3 Group, the Chair of Logistics and Quantitative Methods under Prof. Pibernik (www.wiwi.uni-wuerzburg.de/bwl11/) offers multiple positions for

Doctoral Students
within our research initiative
"**AI-based Operations & Supply Chain Management**"

Topic: In Operations and Supply Chain Management, there is a huge potential for employing Machine Learning techniques that leverage ("big") company data to arrive at better decisions in an automated fashion. During the last years, our team has successfully developed and analyzed several new approaches that are very attractive from a scientific viewpoint and are deployed by companies in real-world applications. In this very dynamic and quickly evolving field, we are developing and studying new approaches and algorithms that will – in future – shape how companies take better data-driven decisions under uncertainty in an automated fashion.
Currently, our focus lies on the development of foundation models using large-scale time-series transformers and deep reinforcement learning that enable companies to leverage data to obtain better operational decisions, e.g., for inventory or capacity management. In our work, we combine concepts from machine learning, statistical learning theory, and mathematical optimization to balance both the theoretical validity of our algorithms and their applicability to real-word problems. We collaborate with various companies and utilize their extensive data sets to test and validate our approaches.

Candidates: We are seeking motivated and highly skilled individuals to support our research efforts in this novel and very innovative area. Candidates should have a strong analytical background, preferably in Data Science, Machine Learning, Optimization, and/or other areas related to our topics. Experience in Supply Chain Management is a plus, but not required.

Environment: We offer a very attractive and flexible work and research environment: You will be part of an ambitious team with entrepreneurial spirit that comprises young and motivated researchers with different academic backgrounds (e.g., mathematics, economics, data science, engineering). You will receive excellent support and supervision; you will develop research results and publications in leading scientific journals that count toward your doctoral dissertation, and you will have the opportunity to attend international summer/winter schools, partake in international conferences, and spend time at other international institutions with which we collaborate. Ideally, you will complete your dissertation in not more than three years.

Salary: We offer an attractive remuneration according to the German TV-L System (E13 if prerequisites are met).

Application: Interested candidates should apply to richard.pibernik@uni-wuerzburg.de, including the usual documents (cover letter, CV, transcripts). Do not hesitate to contact us in case you have any questions regarding these positions.

The University of Würzburg is an equal opportunity employer. As such, we explicitly encourage applications from qualified women. Handicapped applicants will be given preferential consideration when equally qualified.