

At the Chair of Logistics and Supply Chain Management of TUM School of Management, we are looking for an interested and qualified student to conduct his/her

## **Project Study**

on the topic

### **Application of Large Language Models in Operations Management**

Recent advancements in Large Language Models (LLMs), such as GPT, have opened up new possibilities for Operations Management (OM). While LLMs are widely used in areas like customer service and content generation, their potential for solving operational challenges remains largely unexplored. This project aims to identify promising use cases for LLMs in Operations and Supply Chain Management.

Students will work with a predeveloped model and focus on extending its functionality to explore specific OM applications. Rather than building frameworks from scratch, they will analyze its potential, refine its capabilities, and assess its feasibility for different operational challenges. The goal is to evaluate the effectiveness and limitations of LLM-driven solutions, providing insights into their real-world applicability.

#### **Key project tasks:**

- Conduct a literature review on LLM applications in Operations and Supply Chain Management.
- Extend available framework for evaluating LLM-based solutions in OM.
- Implement a prototype or proof-of-concept for one selected use case
- Evaluate the effectiveness of LLM applications compared to traditional methods.
- Present findings in a final report and presentation.

#### **Requirements:**

This project study is open to students at TUM School of Management with a focus on Operations and Supply Chain Management. Experience with Python and Large Language models such as OpenAI models is plus.

**Earliest begin:** as soon as possible

**Supervisor:** Mahsa Nakhost

**Application:** Email with curriculum vitae and transcript of records to [logtheses.log@mgt.tum.de](mailto:logtheses.log@mgt.tum.de)