

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

## **Interdisciplinary project**

on the topic

### **A Last-mile delivery routing for the city of Munich**

Last-mile delivery, the supply chain's final and often most crucial leg, poses unique challenges in urban environments due to traffic congestion, complex road networks, and varying customer demands. This project aims to develop efficient routing strategies, for using vans, cargo bikes, and mini-hubs that consider the specific characteristics of Munich's urban landscape. The goal is to enhance the overall delivery process, reduce costs, emissions, and improve customer. A general setting and required data will be provided.

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

- Literature review on relevant fields of study
- Implementation of the solution strategy for vans
- Implementation of the solution strategy for utilizing cargo bikes
- Implementation of the solution strategy for mini-hubs

#### **Requirements:**

The interdisciplinary project is for students at TUM. Good programming skills in Python are required. The ability to structure the research (e.g., exploration, focusing, validation, and detailing), to work independently, as well as analytical skills are required. Experience with Python is a plus. Knowledge of routing algorithms is a plus. The report should be written in English.

**Earliest begin:** as soon as possible

**Supervisors:** Mahsa Nakhost, Yihua Wang

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