Our team is looking for a

Research Assistant / Studentische Hilfskraft (m/w/d)

to contribute to the research project

Collaborative Traffic Optimization and Control (COLTOC)

for 10 hours per week. Start date: as soon as possible.

The project
- Development of a fundamental graph model to identify bottlenecks in a transportation system
- Development of a matching platform to assign trip requests to modes of transportation in order to balance the traffic flow in the system
- The project is part of the Munich Cluster for the Future of Mobility in Metropolitan Region (MCube). For more information, visit: https://www.mcube-cluster.de/en/projekte/
- Partners:

Your role/Our offer
- Collection, preprocessing and analysis of traffic data
- Contribute to the modeling of the transportation network as a time-expanded flow network
- Implement a machine learning model to identify bottlenecks in the transportation system
- Develop tooling to support data visualization
- Participate actively in research

Your profile
- Bachelor's Degree in Computer Science, Engineering, Mathematics or a similar program
- (Basic) proficiency in Python
- Previous experience with other scientific programming languages (C++, Julia, ...) is a plus!
- Previous experience in machine learning and optimization (OR) is a plus!

About us
The Professorship for Business Analytics and Intelligent Systems focuses on the development of algorithms in the fields of operations research and machine learning applied to transportation systems, logistics networks, and supply chains. Visit https://osm.wi.tum.de for more information.

Application
Are you interested and would like to chat about the project? Send your CV and other documents or references (e.g., github/leetcode/etc. account) to breno.serrano@tum.de.