

Our team is looking for a

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

to contribute to a research project on planning the operation of a

## autonomous E-Shuttle service with inductive charging

for 10 hours a week. Earliest begin: 01.10.2021.

### The project

- Deployment of 2 autonomous shuttle-busses in the area of Bad Staffelstein
- Charged inductively on charging pads (stationary) and via road-embedded coils (while driving)
- Partners:



### Your role/Our offer

- Contribute to a real-world case-study in the context of autonomous electro-mobility with inductive charging
- Work on a bleeding edge Python/C++-20 implementation of a state-of-the-art Branch-and-Price algorithm
- Develop tooling to support data scraping, analysis & visualization
- Participate actively in research

### Your profile

- Bachelor's Degree in Computer Science, (Electrical) Engineering, Mathematics or a similar program
- (Basic) proficiency in a modern systems programming language (C++, Rust, ...)
- (Basic) proficiency in another general purpose programming language (Python, Go, ...)
- Ability/Desire to work in a linux driven environment
- Previous experience in optimization (OR), with autonomous vehicles and/or (inductive) charging is a plus!
- Experience with (full-stack) web development (Vue.js, Flask/FastAPI/Express.js) is a plus!

### About us

The professorship of operations and supply chain management 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 [patrick.sean.klein@tum.de](mailto:patrick.sean.klein@tum.de).