SA:

**Fast Route Finding**

Finding the shortest distance and best route to take has numerous applications in our daily lives. However, with our current road network, it is a hard task to find a driving route. A few approaches that use distributed labels solve this problem to a satisfying degree.

In this thesis we are going to incorporate data scientific approaches and theory of distributed algorithms to further speed up and add more features to a route finding system.

**Requirements:** Strong motivation, in addition to basic skills and knowledge in programming, statistics, and distributed algorithms.

Interested? Please contact us for more details!

**Contact**

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Detailed Project Outline

We denote the following primary tasks mandatory (on the right side you find a rough estimate for the time that we allocate to the respective task), however the direction of the project is flexible:

- Literature research
- Implementation of the vanilla method to get some basic results
- Performance analysis of the vanilla method
- Public data about people’s commutes
- Comparison of our methods with the real world data
- Write a report
- Present your findings.

The Student’s Duties

- One meeting per week with the adviser to discuss current matters.
- A final report in English, presenting work and results.
- A final presentation (15 min) of the work and results obtained in the project.