



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

- Aryaz Eghbali: aeghbali@ethz.ch, ETZ G60.1

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.