



BA/SA/Group/Lab:

Attractive Sports Route Generation

A large number of outdoor sports apps exists on the market. Many of them allow users to track their routes and evaluate their workouts. Some apps enable sharing routes between users and few tools exist for automatic route generation. However, the latter are mostly quite simple and yield unsatisfying results.¹ The typical exercise procedure therefore starts with manual planning or selection of a route. As this is an undesired overhead, people tend to use the same routes over and over again, although this is rather boring.

We think that route generation for outdoor sports like workouts, hiking or even just sightseeing can be done in much better ways using a smartphone. In past theses, we created an app² which generates routes for running, biking, hiking and other outdoor sports in Switzerland.



The goal of this thesis is to improve the generated routes based on environment features and make the route generation in the server more efficient. Furthermore, the routes should be presented with an attractive user interface.

Requirements

- Creative thinking and good programming skills are advantageous to successfully work on this topic.
- The student(s) should be able to work independently!

Interested? Please contact me for more details!

Contact

- Manuel Eichelberger: manuelei@ethz.ch, ETZ G97

¹ <http://www.plotaroute.com/>
<http://www.routeloops.com/>

² Smart Route Website: <http://virt10.ethz.ch/>