



BA/MA/SA/Group/Lab:

Smart Running Route Generation

There are many outdoor sports apps on the market. Many of them allow you to track your routes and evaluate your workouts. Some apps enable sharing of 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 selecting 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 running route generation can be done in much better ways using a smartphone. By leveraging maps and additional data, we should be able to improve the workout experience. Specifically, we want to create an app which generates routes on the fly, that is similar to satellite navigation devices which can adapt the route if the user deviates from the foreseen path. In our specific case, the app might also adapt to the user's fitness conditions and other variables.



Based on an app developed in a past thesis, your task would be to extend this app with our ideas and put it to the Android store.

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

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