Automatic Running Route Generation: On the Fly!

There are many jogging/cycling/etc. apps on the market. Most of them allow you to track your routes and offer similar features. Some of them even have routes created by other people for you to choose. Even fewer tools exist for automatic route generation, but they are mostly quite simple and yield unsatisfying results [1, 2].

The typical exercise procedure therefore starts with either manual planning or by manually selecting a route created by somebody else. As this gets boring rather quickly, people end up running the same route over and over again. We think it’s time to spice exercising up, by creating routes on the fly! As the route planning is performed throughout the exercise itself, the app might react to the users fitness conditions better than a preplanned route. Additionally, the user only gets information during the run, making the experience more exciting.

Such an app is not necessarily limited for running, but might be applicable also for other purposes, e.g., cycling.

We have some ideas with which you could start, but we are of course excited if you bring your own ideas!


Interested? If you are interested, we are happy to hear from you and to have a small chat.

Requirements

- Good programming skills and creativity are advantageous.
- The student(s) should be able to work independently on this topic.

Contacts

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