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Open position – *Driving Strategy*

Optimisation & Modell

YOUR DEPARTMENT

Even the best solar car in the world is not enough to win the world championship. We in the driving strategy department are concerned with getting the maximum performance out of our solar car. The goal is to drive as efficiently as possible, using wind, weather and gradients to our advantage to get to the finish line as quickly as possible. During the race we are responsible for all tactical decisions and hold the reins for a flawless race. In order to be prepared for all eventualities, we are constantly developing various tools in the driving strategy. These include, for example, the data link between the sun car and the support vehicle, a digital vehicle model, visualisation of weather and vehicle data as well as the optimisation of the speed curve.

YOUR TASK

The core task of the driving strategy is to determine the optimal speed profile. This is exactly what you are the specialist for. The basis for this is a detailed and carefully adjusted model of our solar vehicle, with which the behaviour of the solar car can be precisely predicted. This knowledge, along with weather and track data, is then used to calculate the best speed trajectory. During the race, you are directly in the control centre and make tactical decisions based on the optimisation.

There is also the possibility of writing a thesis on optimisation in cooperation with the RWTH Chair for AI Methodology (i14).

WHAT YOU BRING TO THE TEAM

- Student in computer science, data engineering or a comparable field of study
- Experience in programming, ideally in Julia and Python
- First knowledge and experience in modelling and simulation is advantageous
- High level of commitment, learning ability and motivation

WHAT WE OFFER YOU

- Development of one of the most efficient solar cars in the world
- Opportunity to apply your theoretical knowledge in practice and implement your own ideas in an exciting environment
- Use of Julia, Python and Git within the scope of a demanding project
- Contact to potential employers and the development of a professional network (in industry and research)
- THE experience of your studies!

APPLICATION

Please apply exclusively via the application form on our website:

www.sonnenwagen.org/join

Apply now!

Address: Eilfschornsteinstraße 12, 52062 Aachen
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TEAM SONNENWAGEN AACHEN

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