

Completely new Skid Pad Algorithm Driverless

OUR PROJECT

Formula Electric Belgium is a student-run electric race team which competes in Formula Student, the world's largest competition for engineering students. We aim to push the limits of performance, innovation and sustainability within electric racing every year, which is only possible with the help of our Thesis students. These pioneers are responsible for performance-defining innovations within the team, and we would love for you to join our team of highly ambitious and motivated engineers. As a Thesis student, you will research, design, prototype and test your innovations alongside the full-time members which make sure the team pushes itself and the car to new heights.

AIM AND OBJECTIVE

Skid pad (or skidpad) is an event where the cars must drive an 8 formed circuit performing 2 laps of each circle. It's an event that's very promising for driverless as the layout of the circuit is always the same. This means, it's an event that is very predictable and thus "easy" to code exactly what you want your car to do.

For this thesis, we want a completely new skidpad algorithm with the goal to beat the current one in the same conditions. Because it's really an event on it's own, you can spend a lot of time on the algorithms making them nearly perfectly hardcoded and super fast. The top teams are already beating human drivers and we want to keep up with them, which is only possible if a team focuses only on this and that's why what we're looking for in this thesis.

PROFILE

- Experience in Object-Oriented Programming
- Knowledge of C++
- Some knowledge of vehicle models is a bonus
- Problem solving and not getting stuck in tunnel vision is needed
- Well-organized
- Communicative

RETURNS

- Practical experience in a high-end engineering context
- Work with the newest technologies and innovative companies
- Developing your hard- and soft-skills in a company-like environment
- Participation in the biggest student competition in the world

INTERESTED?



Send us your contact details and field of interest to

recruitment@formulaelectric.be