Vehicle Dynamics

Semi-Active Suspension: Algorithms

Green Innovation meets performance

Our Project

Formula Electric Belgium is a student-based race team that pushes green innovation to performance. We design and build our own electric race car each year to participate in the international Formula Student competitions. This year, we are looking for pioneers to challenge the status quo and bring our topnotch electric race car to the next level. As a postgraduate student, you will research, design, test your systems together with a group of highly motivated, ambitious students. You will work together with your team members and numerous companies to develop new innovations.

Function

As a Vehicle Dynamics engineer, you will be responsible for all aspects regarding the handling of the vehicle.

This consists of designing the suspension and steering system, determining spring rates, choosing a good set-up, all while ensuring that the design is rule-compliant.

Since a couple of years research has been done to implement a semi active suspension. Your task will be to optimize this system algorithm. You will be in charge of the extension of these algorithms, making them faster and more efficient while also tuning them on a 4 poster.

Up for the challenge?

Profile

- Bachelor/Master Engineering Science, Engineering Technology or Business Engineering
- Experience with Matlab
- Experience with coding and/or control sys tems (PID controllers etc.)
- Basic knowledge of vehicle dynamics

Returns

- Hands-on experience in a competitive environment
- Insight into different algorithms
- Gain exposure to cutting-edge technologies and industry-leading organizations
- Possibility to network and cooperate with (motorsport related) stakeholders
- A summer packed with international racing competitions!



Submit your resume and motivation letter (one page)

to <u>recruitment@formulaelectric.be</u>