Design and development of an optimized dashboard interface

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

The aim of this thesis is to design and implement a dash-board system for Formula Electric Belgium's race car that optimally balances functionality, usability, and performance. By combining principles of Human-Computer Interaction with advanced software development techniques, the project seeks to enhance the driver's experience and improve the overall efficiency and reliability of the vehicle's interface during racing conditions.

To achieve this aim, the project focuses on the following key objectives:

- Develop an ergonomic and intuitive dashboard layout

- Leverage advanced software technologies like ROS2, C++ and Qt

- Test and refine through driver feedback

- Deliver a robust, ready-to-use solution

PROFILE

- Willingness to learn new technologies

- Education in software development

- Experience with C++, Qt and/or ROS is a bonus

- Experience with HCI is a bonus

- Experience with electronics is a bonus

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