UGent Racing 2025 - 2026

TEAM AUTONOMOUS SLAM ENGINEER



OUR STORY

UGent Racing is a team of more than **90** ambitious, motivated and talented **students** who build an **electric** and **autonomous driving race car**. UGent Racing aims to participate in the **Formula-Student** Competitions which are organized during the summer months across different European countries. Moreover, UGent Racing intents to have a **positive impact on society** by contributing to the mobility of tomorrow and forging higher education of the future.

YOUR RESPONSIBILITIES

As a Software Engineer in the SLAM Team, you will play a key role in the perception and localization systems that enable our autonomous race car to navigate the track with precision. Your primary focus will be on Simultaneous Localization and Mapping (SLAM), ensuring the car can accurately determine its position and speed while continuously generating a reliable map of the track. You will develop and optimize SLAM algorithms to process sensor data, allowing the car to localize itself in real-time and adapt to changing track conditions. Additionally, you will implement lap detection mechanisms, ensuring accurate lap counting and finish-line recognition. Given its central role in the autonomous stack, your work will be essential for integrating localization data into the car's decision-making and control systems.

YOUR PROFILE

- Highly motivated
- Committed
- Responsible
- Communicative

- Analytical mindset
- Coding skills
- · Interest in signal processing

OUR OFFER

- Be part of a young, ambitious team of students
- Apply your theoretical knowledge in a real-life business case
- Get the chance to work on an actual self-driving car
- Get the chance to participate in the international Formula Student competitions

INTERESTED?

Contact us through info@ugentracing.be if any questions would pop up.