

## UGent Racing 2024 - 2025

### Autonomous

# Software Engineer SLAM



#### **OUR STORY**

**UGent Racing** is a team of more than **80** ambitious, motivated, and talented **students** who build an **electric** and **autonomous driving race car**. The team consists both of engineering students and business students. 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 our Simultaneous Localization and Mapping (SLAM) subteam, your primary responsibility will be to **design**, **evaluate and enhance our SLAM framework**. This subteam plays a crucial role in the autonomous pipeline and is essential for autonomous driving. As SLAM holds a central position, you will also be responsible for general systems such as the **autonomous state machine** and the **overall maturity of the stack**. You will work with **data from both our simulator and real-world data** form our self-driving platform Pegasus. Your tasks will include **gathering statistics**, finetuning hyperparameters of existing algorithms, and modifying them to improve their performance.

YOUR PROFILE OUR OFFER

- Analytical mindset
- Interested in signal processing/statistics
- Highly motivated
- Committed
- Open-minded
- Communicative
- Creative

- Be part of a young, ambitious team of engineers and business students
- Get the chance to work on an actual self-driving car
- Apply your theoretical knowledge when developing useful applications
- Get the chance to participate in the international Formula Student Competitions
- See your own design come to life on the new race car

#### INTERESTED?

Contact us through recruitment@ugentracing.be. If any questions would pop up, please feel free to ask.