

UGent Racing 2025 - 2026

TEAM AUTONOMOUS PERCEPTION 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 intends 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 Perception Engineer in the Autonomous Team, you will develop and optimize the perception systems that allow our race car to understand its environment. Your focus will be on cone detection, depth estimation, and machine learning optimization to ensure accurate real-time perception for autonomous navigation.

You will work with cameras, LiDARs, and advanced machine learning techniques such as YOLO, keypoint detection, and PnP, refining algorithms for object detection and tracking. Additionally, you will develop sensor fusion algorithms that combine data from LiDAR and cameras to create a reliable representation of the surroundings. Using industrial-grade hardware from brands like Baumer, Ouster, and NVIDIA, you will optimize existing models or develop new solutions efficiently.

YOUR PROFILE

- Highly motivated
- Committed
- Responsible
- Communicative
- Interest in machine learning
- Interest in data science
- Coding skills

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.