



# UGent Racing 2024 - 2025

## Autonomous

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## Software Engineer Perception



### OUR STORY

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**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 intends to have a **positive impact on society** by contributing to the mobility of tomorrow and forging higher education of the future.

### YOUR RESPONSIBILITIES

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As a software engineer on our Perception subteam, your primary responsibility will be to work with **cameras, LiDARs, and Machine Learning**. You will be involved in various tasks such as cone detection, depth estimation, and machine learning optimization, collaborating with your team members to develop and refine algorithms. We use advanced technologies like **YOLO, keypoint detection, and PnP**, and our hardware comprises professional industrial equipment from renowned brands like Baumer, Ouster, and NVIDIA, which ensures that you will work with **top-of-the-line products**. With access to a large **GPU cluster**, you will have the freedom to tweak existing algorithms or develop new models rapidly. Moreover, our **Pegasus development platform** will enable you to validate your progress efficiently.

### YOUR PROFILE

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- Interested in or knowledge of Machine Learning and Data Science
- Highly motivated
- Committed
- Open-minded
- Communicative
- Creative

### OUR OFFER

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- 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?

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Contact us through [recruitment@ugentracing.be](mailto:recruitment@ugentracing.be). If any questions would pop up, please feel free to ask.