

# Motion Planning Intern for low-speed maneuvering

## Zürich

Embotech is a software company developing cutting edge motion planning technology for autonomous vehicles. We are determined to accelerate the transition towards safe autonomous transportation by leveraging the core real-time optimization technology that we have been developing since 2012. Our team is comprised of highly skilled employees with a passion for excellence and efficiency. We are looking for highly motivated people to help us solve one of the most complex challenges of tomorrow and take our company to the next level.

We are looking for an intern who is passionate about motion planning, to support our development team in Zurich.

We offer an exciting job in a fast-growing company with attractive conditions and flexible hours. Embotech develops innovative products in a modern and dynamic environment, and you can expect an international atmosphere, with young and motivated colleagues.

### Responsibilities

- Develop, improve and maintain algorithmic solutions for motion planning.
- Write modern C++ code adhering to best practices.
- Write automated tests.
- Write and maintain tools and scripts (C++, Python, Bash, etc.).
- Document your code and designs.
- Coordinate development efforts with other members of the team.
- Support vehicle testing if needed.

### Requirements

- Pursuing a Master's degree in robotics, computer science, electrical or mechanical engineering, or a similar field.
- Solid knowledge in the following areas:
  - Search-, sampling-, and optimization-based motion planning algorithms.
  - Model predictive control.
  - Algorithms and data structures.
- Proficiency in modern C++ (STL, templates, smart pointers, etc.) and Python.
- Familiarity with Linux and git.
- Excellent communication skills in English.
- Fast familiarization with new tasks, problems and environments.

The duration of the position is limited to **6 months** (preferred starting time for this position is **September 2024**, ideally for a duration of 6 months.). We look forward to receiving your complete application documents (resume, grades, cover letter and reference letters) by email: [careers@embotech.com](mailto:careers@embotech.com)