INTERNSHIP IN AUTOMATED DRIVING FUNCTIONALITY DEVELOPMENT
Structured and high-speed driving
Zurich

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.

As an intern for automotive functionality development you will join a small team of top technical talent to develop safe, efficient and reliable trajectory generation algorithms for vehicle motion planning and control. You will be working on one or more internal and customer projects.

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 algorithmic solutions to unsolved problems
- Write automated testing tools to improve the behaviour of your algorithms and software
- Document your code and designs
- Model dynamical systems
- Interface to driving simulators
- Setup hardware-in-the-loop testing environments to validate performance against requirements
- Write latency-optimized safety-critical embedded C code adhering to best practices
- Coordinate development efforts with other members of the team

Requirements

- Pursuing a Master's degree in computer science, electrical or mechanical engineering
- Understanding of control theory, dynamical systems and optimal control
- Knowledge in at least two of the following areas:
  - Applied model predictive control
  - Autonomous driving/motion planning
  - Advanced vehicle dynamics (modelling and control)
  - Path finding algorithms
- Proficiency in C/C++ and Matlab/Simulink
- Familiarity with Linux and the GNU toolchain is a plus
- Excellent communication skills in English
- Analytical problem-solving skills and fast familiarization with new tasks, problems and environments

Our preferred starting time for this position is April 2024, ideally for a duration of 6 months.

We look forward to receiving your complete application documents (resume, cover letter, grades/transcripts and reference letter) by email: careers@embotech.com

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