



Software Developer Motion Planning & Control (m/w/d)

 Berlin, Deutschland  Angestellte/r  IT

MOTOR Ai is a Berlin-based startup reshaping the future of autonomous driving. With a focus on innovation, precision, and real-world impact, we're at the forefront of developing certified Level 4 autonomous systems. Our team thrives on solving complex challenges and pushing boundaries to make cutting-edge technology a reality. At MOTOR Ai, you'll be part of a driven, collaborative team shaping the mobility of tomorrow—today. Join us and be a part of something transformative.

We are seeking a talented and motivated Software Developer with expertise in Motion Planning and Control to join our Autonomous Systems team. In this role, you will contribute to the development, optimization, and validation of motion planning and control algorithms for autonomous vehicles or robotic platforms. You will be working closely with cross-functional engineering teams, utilizing ROS2, C++, and Python, and leveraging real-world and simulated data to refine system behavior.

Aufgaben

- Design, develop, and fine-tune motion planning and control algorithms for autonomous systems.
- Integrate and maintain components within the ROS2 ecosystem for planning and control pipelines.
- Develop robust software modules in C++ and Python, ensuring performance, reliability, and maintainability.
- Analyze and utilize recorded sensor and vehicle data to validate, debug, and improve algorithms.
- Create and maintain test processes (unit, integration, and system-level) using both simulated and real-world test data.
- Design and implement automated and semi-automated test workflows for continuous validation of planning and control behavior.
- Participate in street testing activities, including test planning, real-time monitoring, and post-processing of results.
- Collaborate across disciplines to ensure seamless integration and operation of planning

and control subsystems within the broader system architecture.

- Document algorithmic designs, system behavior, and validation results for both internal and external stakeholders.

Qualifikation

- Bachelor's or Master's degree in Robotics, Computer Science, Electrical Engineering, or a related field.
- Strong proficiency in C++ and Python.
- Experience with ROS2, including development, debugging, and deployment.
- Strong understanding of vehicle dynamics and motion planning techniques for autonomous navigation., and control strategies (PID, MPC).
- Experience working with sensor data (LiDAR, camera, GPS, IMU) and related data processing.
- Hands-on experience with software-in-the-loop (SIL) and hardware-in-the-loop (HIL) testing.
- Familiarity with continuous integration pipelines and version control systems (e.g., Git).
- Ability to interpret and debug complex system logs and performance issues using recorded datasets.
- Experience in autonomous vehicle testing

Benefits

- A dynamic, innovation-driven work environment at the forefront of robotics and autonomous technologies.
- Opportunities to contribute to real-world deployments and high-impact projects.
- Supportive team culture with an emphasis on learning and growth.

If you're ready to drive innovation and make your mark in the groundbreaking field of autonomous vehicles, we'd love to hear from you!

Apply now and join us on our journey to shape the future of mobility.



MOTOR Ai

 11-50 Mitarbeitende

 Softwareentwicklung

 Webseite

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