Welcome to **NEURA Robotics**, the innovator of the robotics world. Our goal is to equip collaborative robots with groundbreaking cognitive capabilities to enable safe and intuitive collaboration with humans. Under the leadership of founder David Reger, we have spent the first years of **NEURA Robotics** laying the foundations for humans and robots to work hand in hand.

"We serve humanity" is not just a motto, but our mission. Become part of our ambitious, international company and shape the future of robotics with us.

Welcome to **NEURA Robotics** - where innovation meets team spirit.

Your mission & challenges

As a Robotics Software Engineer focused on system engineering, you will be the architect of the software that brings our robots to life. You will be responsible for designing, developing, and integrating the low-level and mid-level software stack, ensuring seamless communication from the hardware Abstraction layer up to the application layer. Your work will be critical in creating a robust, high-performance, and scalable foundation for all robotic functionalities. You will work extensively with real-time communication protocols, robotics middleware, and high-performance C++ to build a cohesive and reliable system.

- Design and implement the complete software system architecture for our robotic platforms, ensuring modularity, reliability, and real-time performance.
- Write clean, efficient, and maintainable code in modern C++ (C++17/20) for the core robotics framework.

- Architect and manage the data flow and communication interfaces using ROS2 and its underlying DDS framework.
- Integrate various hardware components (actuators, sensors, compute units) into a unified software system.
- Collaborate closely with hardware, controls, and application engineers to define requirements and ensure seamless system integration.
- Develop tools for system diagnostics, monitoring, and performance profiling.
- Create and maintain comprehensive technical documentation for system architecture, APIs, and communication protocols.
- Establish and champion best practices for software development, including version control (Git), continuous integration (CI/CD), and automated testing.

What we can look forward to

- Bachelor's or Master's degree in Computer Science, Software Engineering, Robotics, Mechatronics, or a related technical field.
- Professional Experience: 3+ years of proven experience in software development for robotics or other complex hardware systems.
- C++ Proficiency: Strong command of modern C++ (C++11 and newer), including object-oriented design, data structures, and performance optimization.
- Robotics Knowledge: Solid understanding of robotics fundamentals such as kinematics, dynamics, control theory, and sensor fusion.
- EtherCAT Experience: Demonstrable, hands-on experience implementing and debugging EtherCAT networks for real-time machine control. You should be familiar with concepts like CoE (CANopen over EtherCAT), distributed clocks, and master/slave configuration.
- Middleware Expertise: Proven experience with ROS2 and a deep understanding of the concepts behind DDS (Data Distribution Service).
- Experience with other industrial fieldbus protocols like CANopen or Profinet.
- Experience with real-time operating systems (RTOS) like QNX, VxWorks, or Linux with a PREEMPT_RT patch.
- Familiarity with simulation environments such as Gazebo or NVIDIA Isaac Sim.
- Proficiency in Python for scripting, automation, and testing.
- Experience in Developing and maintaining EtherCAT stacks and device configurations for real-time control of motors, sensors, and other hardware components.

What you can look forward to

- Become part of an agile company, actively shape topics and benefit from flat hierarchies in a highly motivated team
- Enjoy an attractive salary, flexible working hours and 30 days of vacation
- The freedom to contribute your own ideas and drive them forward
- Celebrate successes together with company events
- Take advantage of our corporate benefits program
- And even more fun with great colleagues

Apply

We are looking forward to meeting you and shaping the future of robotics together. Are you in?

Couldn’t find a suitable position? Please send us an unsolicited application.
We are always looking for passionate tech enthusiasts to help us revolutionize the world of robotics!

NEURA ROBOTICS