

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

We are looking for a senior engineer to take end-to-end ownership of the real-time software stack that drives our next-generation collaborative robots. You will define the architecture, ensure functional safety, and build the high-performance interfaces that connect motion control algorithms to hardware.

- **System Architecture:** Define and own the core real-time software architecture for our cobot platforms, ensuring deterministic performance, safety compliance, and scalability.
- **Functional Safety:** Integrate and validate functional safety mechanisms across hardware and software; support certification according to relevant standards.
- **Motion Interfaces:** Develop and maintain the low-latency interfaces between application software, motion control algorithms, and sensor/motor hardware.

- High-Performance C++: Design and optimize concurrent, low-latency C++ systems; profile, benchmark, and enforce high standards for code quality.
- Technical Leadership: Mentor engineers, establish best practices, and support strong CI/CD and documentation processes.

What we can look forward to

- 5+ years of professional experience designing, architecting, and delivering real-time or safety-critical software systems.
- Master's degree (M.Sc.) in Computer Science, Robotics, Electrical Engineering, or a related quantitative field.
- Proven track record of designing and delivering complex robotics or embedded systems software.
- Demonstrated technical leadership experience, including mentoring engineers and establishing best practices.
- Excellent communication and ability to lead technically across teams.

Core Real-Time Software & Concurrency

- Expert-level modern C++ (C++17/20) in real-time and resource-constrained environments.
- Deep experience with multithreading, synchronization, lock-free or low-contention designs, and deterministic concurrency.
- Strong background in real-time OS tuning, kernel-level performance work, or custom RTOS behavior.
- Proficiency with ROS2 and DDS-based communication.

Motion Control & System Integration

- Solid understanding of kinematics, control theory, and dynamic systems.
- Experience building software layers that connect motion control algorithms with live hardware state.
- Familiarity with real-time motion planning infrastructures (e.g., QP-based solvers).

Functional Safety & Industrial Standards

- Hands-on experience with safety fieldbus technologies such as FSoE or equivalent.
Practical knowledge of relevant robotics standards:
 - ISO 13849 (PL, architecture, documentation)
 - ISO 10218-2025 (industrial & collaborative robot safety)

- Strong skills with EtherCAT (CoE, distributed clocks) and industrial networking.

What you can look forward to

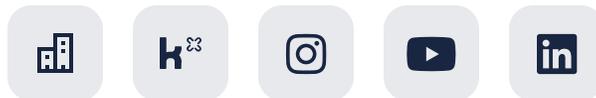
- Become part of an agile company, actively shape topics and benefit from flat hierarchies in a highly motivated team
- Enjoy an attractive salary, flexible working hours and 30 days of vacation
- The freedom to contribute your own ideas and drive them forward
- Celebrate successes together with company 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