

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 scaling our real-time embedded Linux capability across NEURA's current and next-generation robot platforms — cobots, mobile manipulators, humanoids, quadrupeds, and the shared Compute Unit. This role owns the operating system, kernel, and board-support layer that every control and communication stack on these platforms depends on.

You will collaborate closely with the RT Communication Bus engineer, hardware, simulation, and safety / certification stakeholders to deliver platforms that are deterministic, maintainable, and suitable for a controlled product lifecycle.

- Real-time Linux platforms — both co-kernel and kernel-preemption approaches — including RT scheduling policy and interrupt-latency budgeting to meet the timing requirements of the control

and estimation loops running on the platform (kHz-class whole-body control and high-rate state estimation).

- SOM board bring-up and the Yocto BSP for each robot platform hardware revision: boot flow, kernel configuration, device trees, and driver work at the C/C++ boundary, with hands-on debugging on real hardware.
- Yocto layers, recipes, and images for development, validation, and release; structured evaluations and migrations across multiple SoCs and board variants as hardware evolves.
- WCET analysis across RT loop configurations, and RT memory management practice (memory locking, huge pages, NUMA-aware allocation, priority inversion avoidance).
- Co-review of WCET budgets and cycle timing with the RT Communication Bus engineer at the OS / fieldbus boundary, ensuring scheduling, interrupt, and synchronisation assumptions hold under load.
- Safety integration at the kernel level (e.g. E-stop chain wiring, ISO 10218 safety PLC integration); design participation, documentation, and traceability for controlled change practices.
- Build, flash, and test automation; technical documentation kept current for the wider engineering organisation.

## What we can look forward to

- Embedded Linux BSP engineering background with hands-on Yocto / OpenEmbedded experience on production hardware.
- Hands-on real-time Linux kernel patching and tuning experience, with practical scheduling-oriented reasoning (SCHED\_FIFO/RR, priorities, affinity, interrupt path).
- Working knowledge of WCET analysis methodology and tooling (e.g. OTAWA, Chronos, or vendor equivalents).
- Solid C and C++ at the kernel/driver boundary; device tree authoring; practical scripting for engineering workflows.
- Experience on ARM SoCs with multi-cluster configurations (e.g. Cortex-A + Cortex-R), or comparable platforms.
- A collaborative working style: shared design, constructive code review, proactive communication, and reliable coordination across hardware, communications, and safety disciplines. Strong teamwork is essential for this role.
- Bachelor's degree in a relevant field, or equivalent practical experience.

### Nice to Have

- EtherCAT familiarity sufficient for OS / fieldbus-boundary co-review (WCET budgets and cycle timing).

- Exposure to functional safety engineering practices (ISO 26262, IEC 61508, or ISO 10218) — documentation, evidence, review cycles. Certification sign-off is not required for this role.
- Experience with PTP / IEEE 1588 hardware timestamping at the kernel network driver level.
- Background in robotics, motion control, or industrial automation with strict timing expectations.
- Interest in growing scope as the platform team expands.

## What you can look forward to

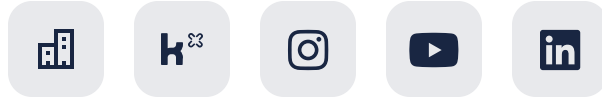
- Become part of an agile company, actively shape topics and benefit from flat hierarchies in a highly motivated team
- Enjoy an attractive salary, flexible working hours and 30 days of vacation
- The freedom to contribute your own ideas and drive them forward
- Celebrate successes together with company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