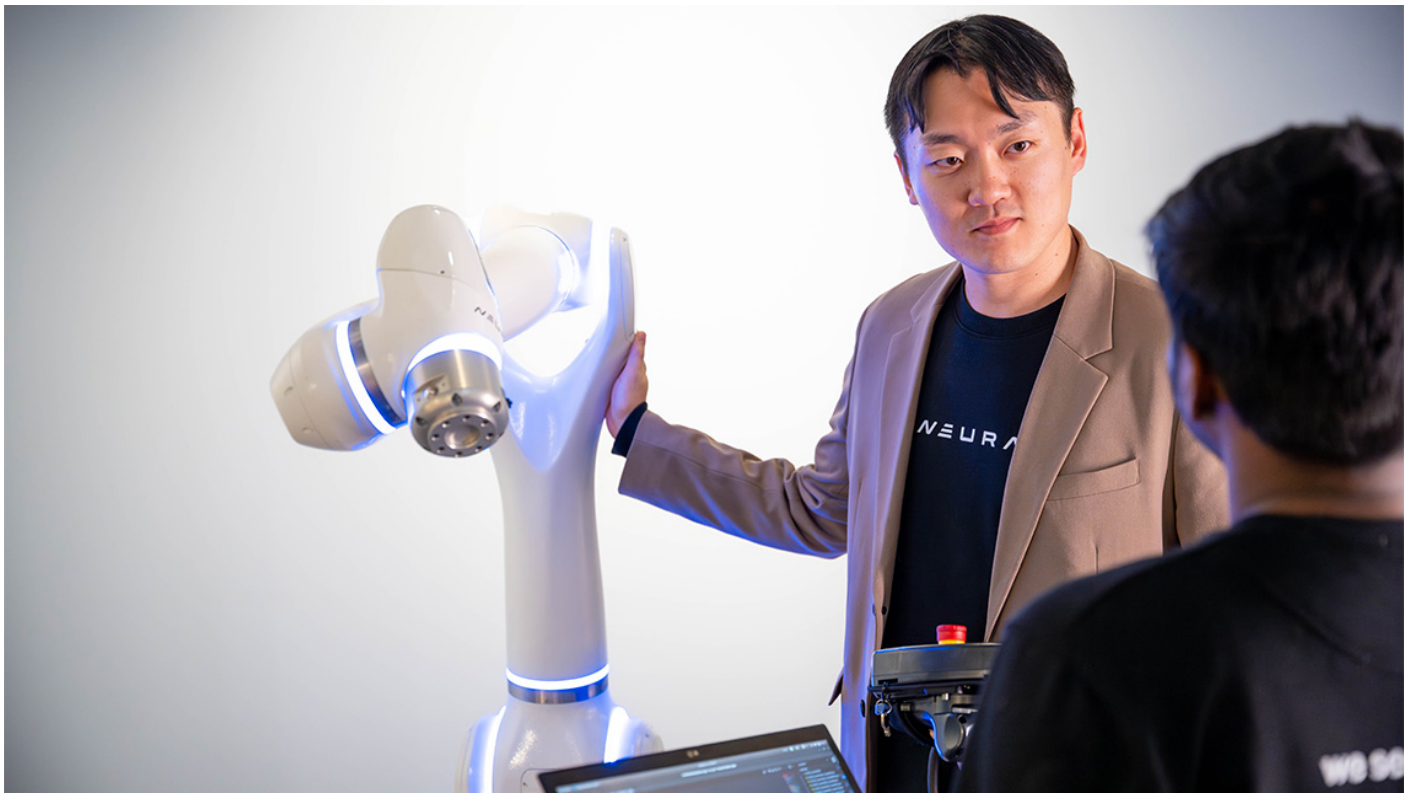

Welcome to **NEURA Robotics**, the innovator of the robotics world. Our goal is to equip collaborative robots with groundbreaking cognitive capabilities to enable safe and intuitive collaboration with humans. Under the leadership of founder David Reger, we have spent the first years of **NEURA Robotics**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

Every byte of data that moves between a NEURA robot's servo drives and the fleet cloud passes through layers of communication infrastructure. As Staff Engineer for our Robot Communication & Connectivity cluster, you own the technical architecture of that entire vertical — from the real-time drive bus at the hardware boundary, through robot abstraction middleware and industrial fieldbus protocols, all the way up to fleet cloud connectivity and the Neuraverse developer SDK.

This is a pure individual contributor role. You carry no people management responsibility. Your authority is technical: you set architectural direction, hold permanent veto on design decisions within your scope, and are the person the team calls when a communication boundary decision is genuinely non-trivial.

You will provide technical leadership to approximately 20 engineers across platform guild and product-anchor roles. You write code, lead design reviews, author technical RFCs, and maintain current hands-on expertise across the communication stack. This is not an architecture-only position.

- Own the architectural direction for the full robot communication stack: real-time drive bus, robot middleware, gRPC control API design, industrial fieldbus protocols, fleet cloud connectivity, and the Neuraverse developer SDK
- Define and maintain the co-review protocol at the boundary between RT OS scheduling and the EtherCAT master — any board support package change must pass a joint latency budget review before merge; you own this process alongside the Robot Systems cluster lead
- Own gRPC control API governance: proto contract standards, versioning policy, backward compatibility, and streaming RPC patterns that all robot platform integration engineers implement against
- Set DDS and ROS2 middleware standards across all platforms: QoS policy, shared-memory transport, zero-copy configuration, and domain isolation
- Own the protocol stack architectural direction for industrial fieldbus integration: PROFINET, EtherNet/IP, OPC UA, and safety bus implementations; define the boundary between the protocol stack and the industrial interface server layers
- Drive quarterly cross-team state machine and API design reviews: any transition guard or gRPC API change that could be generalised must be design-reviewed before platform-specific implementation
- Lead quarterly cluster knowledge days: peer-to-peer problem exchange where every engineer brings one unsolved and one solved problem; output is a shared library ticket or design document, never slides
- Write design documents that reduce knowledge concentration; mentor Senior engineers toward Staff level; drive cluster hiring sourcing

What we can look forward to

- Real-time communication and networking
    - Hands-on EtherCAT master stack implementation and commissioning on production robot hardware — SOEM, EtherLab, or equivalent; configuration alone is not sufficient
    - IEEE 1588/PTP hardware clock synchronisation implementation experience on physical hardware
    - TSN stack configuration: 802.1Qbv/Qav/AS traffic shaping and deterministic Ethernet scheduling for real-time environments
    - Deep DDS middleware expertise (FastDDS or equivalent): QoS design, shared-memory transport, zero-copy, domain isolation at production deployment level
- Robot middleware and API design

    - gRPC/protobuf API governance experience at the cross-team level — you have designed APIs that multiple other teams depend on, including versioning and backward compatibility
    - ROS2 middleware stack proficiency: ros2_control, lifecycle nodes, diagnostics framework, launch architecture
    - Robot operational state machine design for safety-critical systems: boot, homing, fault, emergency stop, and recovery cycle patterns
    - C++17/20 at RT loop constraints: lock-free data structures, 1 kHz control loop discipline, latency profiling
- Staff-level leadership (mandatory)
    - Demonstrated cross-team architectural impact: your design decisions changed how multiple teams work, not just your own domain
    - RFC or design document leadership with cross-team reach: you have resolved interface conflicts between teams and had your proposal adopted as the standard
    - Mentoring track record: at least one engineer you have materially accelerated toward a senior or staff-equivalent level
    - 8+ years of hands-on engineering experience spanning embedded real-time systems and robot communication middleware
- Nice to have
    - Industrial fieldbus protocol stack implementation: PROFINET device stack, EtherNet/IP adapter, safety bus design (FSoE/PROFIsafe)
    - Fleet robotics platform engineering: OTA pipelines, VDA 5050 mission protocol, fleet telemetry at scale
    - Developer SDK design for external developers: typed node systems, skill marketplace toolchains, API versioning
    - Open-source contributions to robotics communication infrastructure (FastDDS, ros2_control, SOEM, or equivalent)

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