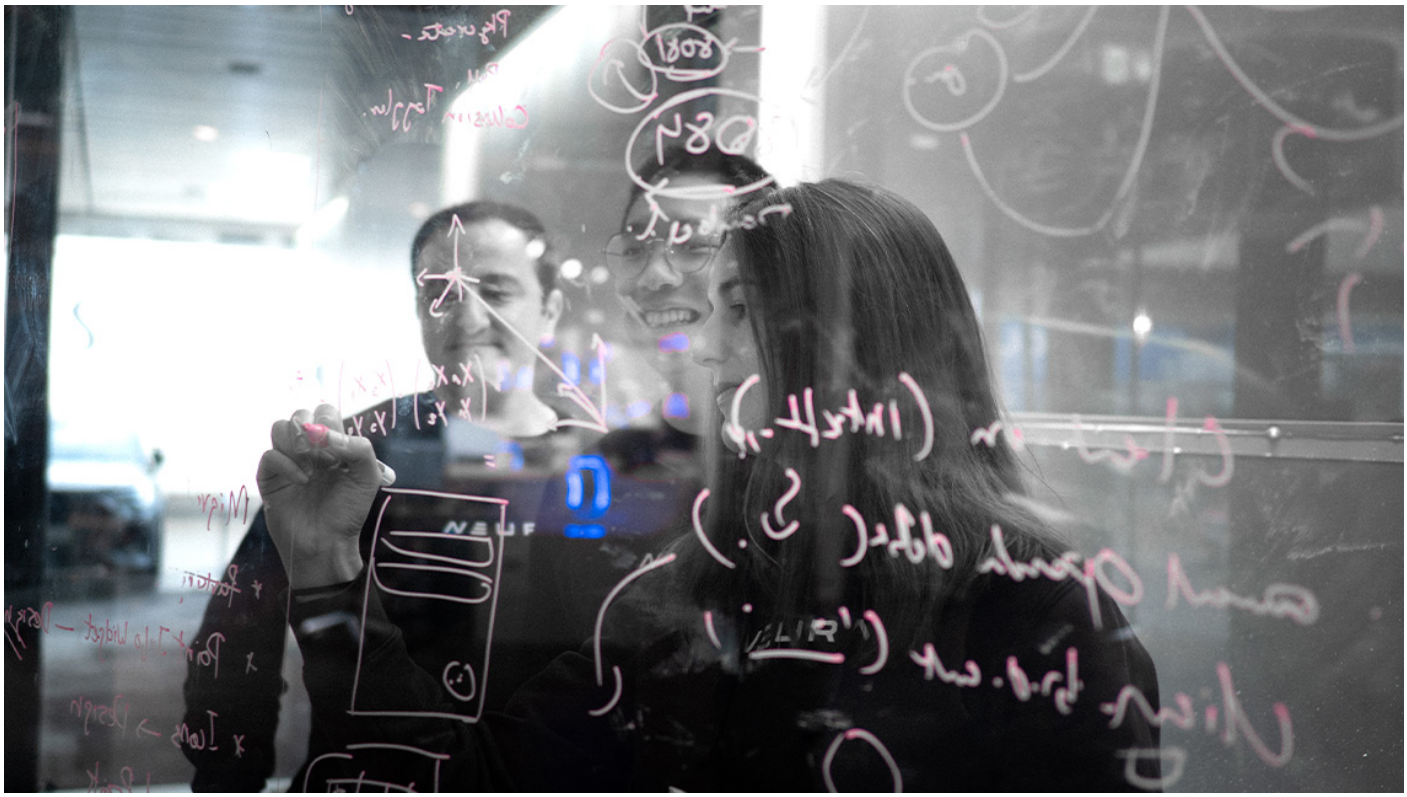

Welcome to **NEURA Robotics**, the innovator of the robotics world. Our goal is to equip collaborative robots with groundbreaking cognitive capabilities to enable safe and intuitive collaboration with humans. Under the leadership of founder David Reger, we have spent the first years of **NEURA Robotics** 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 Robot Simulation Engineer, you will create and maintain high-fidelity simulation environments that enable large-scale training, whole-body control development, and safe validation of manipulation and locomotion behaviors. You will work with advanced physics engines and AI pipelines to reduce the sim-to-real gap and accelerate the deployment of our robots in real environments.

In this role, you will:

- Design, maintain, and deploy physics-accurate simulation environments for multi-contact loco-manipulation scenarios.
- Integrate simulation pipelines with AI and control workflows (e.g. reinforcement learning, whole-body planning, and robotics control stacks).

- Develop scripts, plugins, and custom extensions to enhance simulation fidelity, automation, performance, and scalability.
- Implement robust sim-to-real workflows via system identification, calibration, parameter tuning, and benchmarking against hardware.
- Build and optimize scene parallelization for large-scale learning and accelerated experimentation.
- Generate and manage synthetic datasets for perception and sensor modelling, including RGB-D, IMU, tactile, joint torque/force, proprioception, and LiDAR.
- Build simulation frameworks that support scenario generation for terrain variability, contact-rich manipulation, and failure-mode stress testing.
- Collaborate with Controls, Perception, AI, and Hardware teams to accelerate translation from simulation to real-world performance.

What we can look forward to

- Master’s or PhD in Computer Science, Robotics, Computational Physics, or a related field.
- 5+ years of experience in robotics simulation, physics-based modelling, or AI-driven control & training pipelines.
- Strong programming skills in Python and C++, with experience developing scalable simulation infrastructure.
- Hands-on experience with simulation frameworks such as MuJoCo, Isaac Sim, Newton, or similar.
- Experience with reinforcement learning frameworks and data workflows (e.g., RLlib, Stable Baselines).
- Strong problem-solving, debugging, and performance-optimization skills.
- Experience working independently and collaboratively within fast-moving, cross-disciplinary teams.
- Full professional proficiency in English. German language skills are a plus.

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