Senior C++ Engineer (f/m/d) Geometry & Computer Vision

100% Zürich

Hexagon Robotics is a division of Hexagon – a global leader in precision measurement. Established in 2025, Hexagon Robotics develops humanoid robots for industrial sectors to address labor shortages and enable the transition from automation to autonomy. The first humanoid product, AEON, was launched in June 2025 and combines agility, awareness, spatial intelligence and versatility to provide a market-leading solution for automotive, transportation, aerospace, manufacturing, and logistics customers.

We are looking for a **Senior C++ Engineer** with a background in Geometry & Computer Vision to design and develop robust software for Aeon, Hexagon's humanoid robot.

Your Mission

- Design, develop, test and maintain robust, fast and accurate systems to determine the robot's position, orientation and speed, as well as the exact camera parameters (lens distortion, mounting position and orientation) over the robot's entire lifecycle, from factory to in-field operations.

Your Skillset

Must have:

- Strong fundamentals in Modern C++
- Working knowledge of CMake and Python
- Passion for developing robust, elegant and tested software to solve complex problems
- Pragmatic and hands-on: have an idea and bring it all the way to production

- Collaborate across teams on topics ranging from mechanical design to reinforcement-learning based control algorithms.
- Work in a multicultural and interdisciplinary environment developing a novel robot from prototype to serial production
- Being part of an R&D division with startup spirit in a globally active company: we work in an iterative fashion to solve complex real-world problems at the frontier of robotics

- Motivated to learn new systems and be at the cutting edge of industrial robotics

Experience with any of the following is an advantage:

- Developing and maintaining a complex codebase with high reliability requirements
- Applied 3D geometry: game engines, simulators, graphics rendering, photogrammetry / SLAM, motion planning, etc.
- Data structures: measurement graphs, space partitioning and search trees
- Soft or hard realtime systems, distributed systems and HPC
- Gstreamer, deepstream and V4L2: interfacing with cameras from C++
- Testing with Catch2 or gtest
- OpenCV, Eigen and Ceres Solver: feature extraction and matching, optical flow, nonlinear optimization
- ROS2 basics: record, replay, subscribe, publish, visualise

What You'll Get

- Flexible working hours and a hybrid model for real work-life balance
- Generous vacation: 25–30 days depending on age
- CHF 500 mobility credit for sustainable commuting
- Bonus system & strong pension contributions
- Tailored training & development opportunities
- Relocation support for a smooth start
- Discounts on health, mobility & entertainment
- Team events and a flat hierarchy where your voice counts
- A warm, international culture built on respect and collaboration

Great robots need great people.

Apply Now

Contact

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Hexagon Robotics

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