Senior Software Engineer (f/m/d) – ML Systems

100% Zürich

Hexagon Robotics is a division of Hexagon – a global leader in precision measurement. The division develops humanoid robots for industrial sectors to address labor shortages and accelerate the transition from automation to autonomy. Our first humanoid, AEON, was launched in June 2025 and is already in pilots with five customers.

Build the software bridge that connects our ML "brain" with our robotic stack. You will design and implement the production-grade systems that take ML modules produced by our research team and integrate them cleanly and reliably into the broader robotic stack — ensuring our ML systems remain modular, maintainable, and performant on embedded edge hardware. As the architectural steward of our ML integration layer, you will act as the quality gate between experimental research code and production deployments, mentoring researchers and leading refactoring efforts to keep our codebase clean at scale.

Your Mission

- Design and build clean, stable APIs that allow ML subsystems to be seamlessly consumed by the broader robotic stack
- Own the integration of ML modules from research into the robotic system, covering launching, parametrization, and configuration management

Your Skillset

- MSc in Computer Science, Computer engineering, or a related field
- Mastery of Python and C++, with the ability to move fluidly between high-level ML logic and performance-critical systems code
- At least 5 years of relevant industry experience, including a track record of

- Act as the architectural quality gate — advising the team on code health and leading major refactoring steps before code reaches the production line
- Optimize ML inference workloads for edge deployment targets using ONNX and TensorRT
- Bridge the gap between research and production: translate fast-moving PyTorch and Transformer-based models into reliable, edge-ready software
- Mentor researchers on production-aware engineering practices — helping them write code that is clean, reusable, and ready to scale, without stifling their pace or creativity
- Establish strong engineering standards including modular design, automated testing, and performance profiling

bringing ML or AI systems from research into reliable production deployments

- A software craftsmanship mindset: deep understanding of design patterns, modular architecture, and how to prevent technical debt in fast-moving teams
- Proven ability to design intuitive, well-documented, and modular APIs
- Sufficient understanding of modern ML frameworks and architectures — PyTorch, Transformers, and large-scale datasets — to refactor and optimize them intelligently
- Familiarity with inference optimization tools such as TensorRT and ONNX
- You enjoy the puzzle of refactoring complex, experimental logic into simple and readable code — and you prefer a well-architected system over a quick fix
- Strong engineering judgment — able to balance deep technical work with pragmatic execution to deliver high-impact results

Plus skills:

- Robotics middleware: experience with ROS / ROS2, particularly complex launch configurations and parameter management
- Edge deployment: hands-on experience with embedded GPU platforms such as NVIDIA Jetson
- MLOps & cloud: familiarity with Azure and MLflow for model versioning and lifecycle management
- Data: experience with SQL or NoSQL databases for robotic telemetry or configuration data

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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