Lukas Hamm

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Senior Software Engineer with 10+ years of programming experience, including 6 years in backend development and workflow automation for large-scale enterprise environments. My daily work involved contributing to the decision making throughout the entire software lifecycle in a hybrid, interdisciplinary team. My AI expertise enables me to develop efficient, AI-enhanced systems and stay ahead of the ongoing transformation where AI is reshaping the field of software development.
My tech stack includes: Python, C++, SQL, NoSQL, OpenAI, Gemini, Mistral, LangChain, Docker, Kubernetes/OpenShift, AWS, Vector Databases, and various automation and workflow frameworks.
With this skill set, I build production-ready components that are scalable, maintainable, and easy to integrate into complex enterprise systems. My broad technical background and deep understanding of real-world business processes enable me to deliver solutions that are reliable, future-proof, and built for long-term impact.

Work Experience

AI & Software Automation Engineer *Self-Employeed*

02/2025 - ongoing

Contract Management Tool with AI Assistant

Designing, building, and deploying a smart contract management assistant, integrating vector stores for file retrieval, implementing RAG workflows, and generating AI-driven responses using structured prompt patterns to streamline contract handling and improve decision-making efficiency.

Tech Stack Python, React, Typescript, RAG, OpenAI

Automation Integrations for a Productivity Platform

Automation and workflow optimization, leveraging AI-driven scripts and deployment operations to improve efficiency, reduce manual effort, and enhance overall system reliability.

Tech Stack Python, N8N, Typescript, OpenAI

Software Engineer *Verbund AG*

10/2022 - 12/2024

Energy-Management-System for Large Battery Storages

Development of an intelligent energy and charging management system for large-scale battery units. Responsible for testing and maintaining a multi-site production environment, implementing a hardware-agnostic deployment process, and performing live testing of dynamic charging logic integrated with site energy management systems. Additionally coordinated cross-team technical tasks and developed integrable software components.

Tech Stack Python, Bash, Linux Server, OpenShift, Docker, Docker-Compose, PostgresSQL

Cloud Platform for Electric Vehicle Charging

Developed, deployed, and maintained a cloud-based software solution using the OCPI protocol to enable seamless EV charging network interoperability. Managed open endpoints for live production, streaming real-time charging data to a database, and internal endpoints for analytics.

Tech Stack Python, Openshift, Docker, OCPI, PostgresSQL

Embedded Software Engineer *Rober Bosch GmbH*

03/2018 - 02/2022

IoT Engineering Department

Embedded Software Developer in international automotive IoT projects. Developed and maintained C++ software for wired communication technologies using Docker and CMake. Worked in a self-organized team, managing multiple projects concurrently.

Tech Stack C++, CMake, Docker, AWS, Bash, Linux

Education

Bachelor of Science - Computer Engineering

Technical University of Vienna **04/2024**

A Methodology for Accelerated-Time Simulation of Lithium-Ion Battery Charging Cycles

Bachelor Thesis

Developed a simulation-based testing approach for electric vehicle (EV) charging systems to replace hardware-intensive test setups. Designed and implemented accelerated charging simulations enabling reliable, cost-efficient, and time-saving validation of charging-station software without requiring physical EVs or on-site hardware. Demonstrated that complex charging scenarios can be simulated meaningfully for future large-scale and sophisticated system tests.

General Qualification for University Entrance

Technical Collage **07/2017**

Mobile Survey App with Live Analytics

Graduation Thesis

Developed a native iOS survey application featuring real-time statistics, dynamic data updates, and integrated authentication. Designed and built both the frontend (Swift) and backend systems, ensuring data integrity and reliable live synchronization. Evaluated native vs. hybrid mobile development approaches and implemented a scalable, secure architecture aligned with modern mobile app standards.

Languages

German *Native Language*

English *Professional Working Proficiency*

Italian *Basic Speaking*