

Lucas Rack

Electronics Engineer

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LinkedIn • GitHub

SUMMARY

Electronics Engineer with 5+ years of software experience across AI/LLM applications, distributed systems and enterprise data platforms. Currently building retrieval-augmented generation (RAG) and ML-based automation over global supply chain systems at Lenovo. Proficient in Python, Rust, SQL and PL/SQL.

EXPERIENCE

Lenovo

AI Engineer, Supply Chain Systems

Oct 2025 – Present

- **LLM & RAG Systems:** Built retrieval-augmented generation systems over internal supply chain documentation, enabling teams to query operational knowledge in natural language.
- **Production Support:** Provided Level 2 support for production systems, diagnosing and resolving incidents to ensure continuity of critical supply chain operations.
- **ML Automation:** Automated manual workflows through ML-based classification and data extraction, reducing processing time and human error across 24/7 global systems.

Universidad de Buenos Aires

Teaching Assistant, Embedded Systems Workshop (Taller de Sistemas Embebidos)

Aug 2026 – Present

- **Embedded Systems Teaching:** Guide students in designing, programming and debugging embedded C projects on STM32 (ARM Cortex-M), covering UART, SPI and I2C communication, interrupts, DMA, timers/PWM and ADC.

LambdaClass

Systems Engineer

Mar 2025 – Aug 2025

- **Rust Development:** Developed high-performance Rust applications for Ethereum Layer 1 and Layer 2 clients, enhancing blockchain transaction efficiency.
- **P2P Protocols:** Implemented peer-to-peer communication protocols to enable efficient and secure data exchange in distributed blockchain systems.

Qaracter

Business Consultant

Sep 2021 – Feb 2025

- **Analysis and Requirements:** Performed functional and technical requirement analysis for Santander Global Tech projects, delivering optimized financial solutions.
- **SQL Optimization:** Optimized PL/SQL queries using SQL Developer for efficient data processing in large-scale financial systems.
- **Python Scripting:** Created Python scripts for data processing and API integrations, improving system interoperability.

Eldar

Software Engineer

Jun 2021 – Sep 2021

- **C/C++ Firmware:** Developed firmware for Point of Sale (POS) systems in C/C++ for reliable transactions.
- **Rust Applications:** Created desktop applications in Rust using Tauri for serial communication with pinpad devices.

Universidad Favaloro

Teaching Assistant

Jan 2021 – Jun 2021

- **OOP Teaching:** Taught C++ object-oriented programming and UML design in the Programming Laboratory course for Biomedical Engineering.

EDUCATION

Universidad de Buenos Aires

Buenos Aires, Argentina

Electronics Engineering — Computers & Informatics Orientation

- **Capstone Project — IoT Smart Water Metering:** End-to-end system for remote reading of household water meters. A battery-powered STM32L0 device counts the flow meter's pulses and reports daily over LTE-M/NB-IoT to a multi-node Rust head-end server via a custom low-power IEC 62056-based protocol. Designed the device PCB in KiCad. Characterized the device's power consumption on the bench, projecting over 8 years of battery life.

TECHNICAL SKILLS

Programming Languages: Python, Rust, SQL, PL/SQL, C/C++, Solidity, Java, MATLAB

AI/ML: LLMs, RAG, Vector Databases, Self-Hosted Inference, Hugging Face, OpenAI/Anthropic APIs, NLP

Data: Oracle, SAP HANA, ETL & Data Pipelines, Query Optimization

DevOps & Tools: Docker, Git, CI/CD, Linux, REST APIs, Agile, Blockchain/Ethereum

Spoken Languages: Spanish (native), English (advanced)