



Sebastien Chapuis

Senior Rust developer

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Summary

Prolific developer with **7 years of experience** in designing, developing, and optimizing **high-quality, high-performance software**. Passionate about writing **clean, maintainable code** and solving complex technical challenges.

Proficient in **GNU/Linux performance analysis tools** such as ``perf`` and ``gdb``, with the ability to deep dive into **LLVM** and analyze **assembly code** to diagnose and resolve regressions. Skilled in low-level debugging, performance tuning, reverse engineering, and systems programming.

Passionate contributor to **various open-source projects**.

Experience

Mina Foundation

August 2022 - Present

Rust - Senior Software Developer

Remote

🔗 <https://github.com/openmina/openmina/graphs/contributors>

- **Migrated** an OCaml implementation to Rust, resulting in a cleaner, more maintainable codebase with significantly improved performance and reliability. Bugs were all eliminated or quickly resolved.
- **Designed and implemented** most components of the node, including proof systems, transaction logic, and the staged ledger, ensuring efficiency and correctness.
- **Optimized** both high-level system architecture and low-level cryptographic primitives, particularly in bigint and field-related computations, enhancing overall performance.

Binaryum - Side project

2018 - Present

🔗 <https://binaryum.com/>

Binaryum is a modern **Cross Platform Disassembler** supporting different architectures (including x86, ARM, MIPS and PowerPC).

Available on GNU/Linux, OS X and Windows.

Tezedge

2020 - 2022

Rust - Software developer

Remote

🔗 <https://github.com/tezedge/tezedge/graphs/contributors>

- **Developed** the storage component to efficiently manage blockchain state both in-memory and on-disk, ensuring fast access and persistence.
- **Designed and implemented** a custom database tailored to the node's specific requirements, featuring:
 - **Crash resilience**, leveraging file system capabilities to ensure data integrity.
 - **Atomic writes**, guaranteeing consistency and preventing partial updates.

Wavy

2018 - 2020

Fullstack Web developer

Remote

🔗 <https://wavy.fr>

Optimized the company's mobile application, achieving significant performance improvements on both Android and iOS.

- **Technologies used:** React Native, C++
- **Key focus areas:** Performance optimization, resource efficiency, and responsiveness

Education

EPITECH

2013 - 2018

Computer science

Bachelor + Master

🔗 <https://www.epitech.eu/>

Skills

Programming Languages

including, but not limited to

Rust, C/C++, Assembly (x86 arm), Javascript, Java