Alexander McClain

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Summary

Software developer with nearly a decade of programming experience, including 5 years specializing in Rust, alongside expertise in Python and Java. Contributor to and maintainer of several large open-source projects, with a solid foundation in computer science and strong problem-solving skills.

Skills

- Software Development, Rust, Python, Java, Linux, Git, Open Source Projects, Digital Audio, Blockchain, Cryptography

Work Experience

Webb **Aug 2024 - Present**
Rust Engineer, Contract *Remote*
- Developed and maintained distributed services in Rust, ensuring reliable, scalable systems for decentralized applications
- Ported Rust-based blockchain infrastructure to other platforms, such as WebAssembly (WASM)
- Collaborated in an Agile team to quickly deliver high-quality software solutions
- Wrote technical documentation and improved developer experience, reducing complexity for users and contributors alike

Beebe Healthcare **Jul 2023 - Aug 2024**
Distribution Assistant *Lewes, DE*
- Collaborated with a small team to successfully deliver supplies to hospital departments and prepare orders for external facilities
- Provided responsive customer service by addressing staff inquiries and ensuring satisfaction with deliveries
- Managed the inventory of the supply room, overseeing stock levels and ensuring accurate organization of materials

Education

Delaware Technical Community College
AS, Computer Science

Projects

Lofty **2020 - Present**
- An audio metadata library written in Rust that supports all major audio formats (MP3, FLAC, WAV, and more)
- It is currently used in 400+ public projects, with 300k+ direct downloads
- Available at: https://github.com/serial-ata/lofty-rs

JVM **2022 - Present**
- A low dependency Rust implementation of the Java Virtual Machine, Java SE 23 Edition and accompanying tools
- Provided a deep understanding of topics such as bytecode interpreters and JIT compilers
- Built with Rust, Python, and Java
- Available at: https://github.com/serial-ata/jvm

Supassembler **2022 - Present**
- A runtime x64/x86 assembler, written in Rust and Python
- Built to back the JIT compiler of the JVM
- Supports many of the AMD/Intel extensions, such as AVX-512

MTP **2025 - Present**
- A Rust implementation of MTP (Media Transfer Protocol) over USB
- Allows for media transfer between a host and a mobile device (smart phones, tablets, etc)
- Has a high level and low level interface, and features such as automatic USB device detection
- Capable of handling many of the common specification violations