TIMOTHY MALONEY

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EDUCATION

Portland State University Jan 2020 - June 2022
Bsc Computer Science

- Compilers & Languages
- Performance Engineering

Portland Community College Sept 2018 - Jan 2020
PSU Transfer

- Mathematics & Physics
- Computer Security

LANGUAGES

Rust ● ● ● ● C ● ● ● ○ C++ ● ● ● ○ Python ● ● ● ○ Java ● ● ○ ○

ADJECTIVES

Persistent Debugger Technical Generalist Strong Communicator
Project Leader Concurrent & Parallel Apprentice Open-Sourceror
Codebase Adventurer Performance Analyzer Documentation Writer & Researcher

EXPERIENCE

Rust Compiler

- Added support for inline assembly on IBM's s390x architecture.
- Currently organizing all documentation on parallelism in the compiler.

Ruperf

- Performance analysis tool; emphasizes being informative and versatile.
- Developed a safe API for interacting with Linux performance event subsystem.
- Improved timer accuracy using intra-process communication.
- Added support for gathering cache-event statistics.
- Creator and maintainer of project's website.

Kartina

- Collaborative open-source art project combining deep-house and GPU shading.
- Plays song and renders image in parallel.
- Uses decoded mp3 data to compute pixel colors.

PSU Computer Action Team Aug 2020 - Aug 2021

- First of 2020-21 cohort to hack into the "catacombs"; an area for experimentation with hardware and hacking.
- Built a script for gathering information on PSU windows machines and users.
- Information such as who is logged onto what machine, what processes are they running, etc.