Chloe MacGregor

A swiss army knife computer scientist.

RPI
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https://chloe.wiki

Education

Rensselaer Polytechnic Institute

2022-08-15 - Present

Sophomore

Bachelors Computer Science, Bachelors Mathematics

Summary

A developer knowledgable with computers on all levels. Deep knowledge in:

- Low-level (Rust, C, LLVM IR, assembly, syscalls)
- High-level (Python, Java, and C++)
- Functional (Javascript, Haskell)
- Compiler development (frontend and backend)
- Novel compiler targets (interaction nets)

Fairly familiar with:

- HPC (pipelining, SIMD, dataflow analysis)
- Frontend on the web with Svelte, Sveltekit, and Tailwind CSS

Projects

Synbil

2024-1-20 - Present

Metalanguage

https://chloe.wiki/Synbil.html

A metalanguage that enables writing syntax alongside code. A new way to look at language interop, with exciting opportunities for the performance of webapps.

Brevis

2021-05-31 - 2022-03-29

Programming Language

A general-purpose, non-garbage-collected language compiling to C89, Python, and Javascript. The compiler is built entirely in Rust, is just 3.5K lines of code, and is fully ported to the web, allowing a playground to be built client-side.

Experience

Bold MFG & Supply

2023-06-04 - 2023-09-14

Production Assistant

https://www.boldmfg.com/

- Responsible for boxing+shipping of various fragile, high-value items like powder-coated handrail
- Operated a metal bending break machine, involving usage and storage of highly fragile removable parts worth \$10,000 \$70,000 individually
- Trained and entrusted to use heavy machinery on short notice

Geek Squad

2021-06-01 - 2021-09-20

Geek Squad Advanced Repair Technician

- Component-level repair of client computers
- Performed malware removal on about a dozen devices
- Responsible for documenting the repair process, and communicating with the client throughout