Prashant Rahul

Home: prashantrahul.com

Email: prashantrahul141@protonmail.com Github: github.com/prashantrahul141

Work Experience

Cypherock, Gurugram (Remote)

Aug 2024 - present

Software Engineer Intern

• Worked on firmware for the X1 and X2 hardware wallets

Open source contributions

The Julia Programming Language

[link]

- Improved performance in show() for UnitRange, append! for AbstractVector
- Quality of life improvement when displaying empty ranges

Projects

evelin (compiler, qbe, rust)

[link]

Evelin is a general purpose, statically typed, compiled language using the QBE backend with C FFI support.

[link]

zspie (c, compiler, interpreter)
Zspie is a fast, easy, dynamic programming language, implemented in C with a virtual machine and opcode based execution.

[TIHK]

cipi8 (chip8, chip8-emulator, cpp)

[link]

C++ Chip-8 emulator with opcode, graphics, input, and timer support.

 $\mathbf{x1_wallet_firmware}\ (c,\ cryptocurrency,\ hardware\text{-}wallet)$

[link]

Cypherock X1 Wallet firmware

splax (interpreter, lexer, parser)
A memory-safe, easy, dynamic programming language in Rust with a tree-walk interpreter executing directly on the AST.

[link]

 $\textbf{dotfiles} \ (\textit{dotfiles}, \ \textit{nix}, \ \textit{nixos-configuration})$

[link]

Nix configuration using flakes and home manager for all my machines.

Skills

Programming Languages:

- **Proficient:** Rust, C/C++, Go, Typescript
- Experienced: LLVM IR, QBE IR, Julia, Python, C#

Technologies & Tools:

• GNU/Linux, Nix/NixOS, Git, CMake, Make, Meson, Vi/Vim/Neovim, POSIX Shells, NodeJS, SolidJS

Education

Bachelor's Degree in Computer Science

Graduating in 2027

CV Raman Global University

Senior Secondary Education

2022

DAV Public School