

NICHOLAS B. LUDWIG

nick.b.ludwig@proton.me ◊ 925 321 6137

nick.ludwi.gg ◊ github.com/nickludwig

SUMMARY

Scientist-turned-software engineer building developer platforms and tooling. On the technical side, I have architected and written a wide range of software, including a one-stop developer SDK, a p2p OS, agent frameworks, and more. On the leadership side, I have managed as many as six engineers; interfaced with other departments and companies; presented and discussed my work in public venues. I am a team player, an empiricist, a fast learner with broad interests, and have been building with LLMs since GPT4.

EXPERIENCE

Hyperware FKA Kinode FKA Uqbar

February 2022 - Present

Software Developer to Lead Developer

- Architected, wrote, and maintained developer tools: template, build, test, deploy, publish, all in one convenient kit; iterated from community feedback and dogfooding; used by every Hyperware dev
- Shipped 10+ full-stack applications on Hyperware, from idea to working prototype in under a week
- Redesigned OS homepage using React and iframes to deliver a polished mobile-OS-inspired experience
- Architected and wrote MVP of Wasm VM p2p OS (hyperdrive) adapting bleeding-edge libraries
- Improved DevEx by contributing to core userspace libraries; provided async and intuitive bindings for devs to reduce boilerplate
- Led and contributed to cross-functional app development: managed engineers extending DM-only p2p chat to CRDT-backed group chats; DAO portal for Hyperware smart contract interactions
- Expanded and maintained developer documentation, iterating with community devs to improve
- Worked with business and legal to design token smart contracts within constraints of Swiss law while also delivering utility to users; oversaw development, including shepherding through audits

Mod9 Technologies DBA Remeeting

May 2020 - February 2022

Backend Engineer

- Wrote and maintained Python REST API and SDK to provide dev-friendly interfaces to ASR engine

University of Chicago

January 2015 - August 2019

Graduate Researcher

- Built Monte Carlo frustrated Ising model simulator in C (6,000 LOC); designed Python/Bash pipeline for running HPC jobs and analyzing results; co-authored four papers including one in *Nature*

EDUCATION

University of Chicago

Ph.D., Physical Chemistry

December 2019

University of California, Merced

B.S., Chemical Sciences, with honors; Minor in Sociology

May 2014

SKILLS

Languages

TypeScript, Python, Rust, Golang, C, Bash, Solidity

Technologies

CLI tooling, WebSocket, React, REST, Flask, MCP, Wasm, Docker

Interpersonal

Academic & technical writing, Presentations, Prioritization, Project management