

Alex Hook

Software engineer specializing in Rust, distributed systems, payments, and blockchain infrastructure.

Batumi, Georgia · Remote worldwide; open to US relocation

alexhooketh@proton.me · github.com/alexhooketh · x.com/alexhooketh · alexhook.solutions

Summary

I build complex systems end-to-end — from protocol and smart-contract design to backend infrastructure and production integrations. Previously Software Engineer at Daimo and founder/lead engineer of Untron. Available for full-time and contract engineering roles.

Experience

Daimo

Apr 2025 — Nov 2025

Software Engineer

- Designed and implemented Daimo Universal Addresses, the cross-chain addressing protocol underlying Daimo V2; the smart contracts were audited by Nethermind with two low-severity findings.
- Integrated Circle Gateway, USDT0, and The Legacy Mesh into Daimo Pay, extending cross-chain payment coverage and liquidity routing.
- Integrated Tron USDT support into Daimo Pay using Untron V2, owning the integration across protocol and application infrastructure.

Untron

Aug 2024 — 2026

Founder & Lead Engineer

- Designed and built a trust-minimized Tron !EVM interoperability stack, including multiple generations of bridge architecture, intent-based execution, APIs, backend infrastructure, smart contracts, and frontend.
- Built an onchain Tron light client for EVM chains and developed permanent deposit addresses and permissionless cross-chain settlement mechanisms.
- Took the system from research to production, processing 3,000+ swaps and \$600k+ in volume across integrations with multiple crypto applications.
- Authored the original ZK-based Tron light-client bridge research published on Ethereum Research.
- Owned the complete technical lifecycle: protocol research, architecture, Rust services, Solidity/Vyper contracts, infrastructure, security review, deployment, monitoring, and integrations.

2077 Research

May 2024 — January 2025

Researcher & Writer

- Published 20+ technical articles on Ethereum, EVM infrastructure, and emerging protocols.
- Regularly assigned technically complex research spanning protocol design, Ethereum internals, cryptography, and emerging infrastructure.

Clave

Spring 2024

Intern

- Reviewed early Clave Wallet UX and onboarding flows, with a focus on usability for non-crypto-native users.
- Contributed to product and protocol concepts spanning social/ZK recovery, yield, account abstraction, and interoperability.
- Ran a 10-person user study with crypto beginners and translated findings into product feedback.

Selected Projects

Untron V3 — A horizontally scalable cross-chain liquidity protocol for Tron and EVM, implementing a Tron light client in Solidity. Includes permanent deposit addresses and multi-asset support. Code: github.com/ultrasoundlabs/untron-v3

Daimo Universal Addresses — A cross-chain addressing protocol I designed and implemented at Daimo, enabling reusable, chain-agnostic payment addresses across EVM and non-EVM chains. Smart contracts audited by Nethermind with two low-severity findings.

Untron Intents — An intent-based bridge protocol that executes arbitrary transactions on Tron from EVM chains, powered by Untron V3. Code: github.com/ultrasoundlabs/untron-intents

Technical Expertise

Languages

Rust · TypeScript · Solidity · Vyper · Python · Noir · SQL

Systems & Infrastructure

Distributed systems · Backend architecture · PostgreSQL · APIs · Linux · Docker · Cloud · Networking · Observability

Blockchain & Cryptography

EVM internals · Smart contracts · Cross-chain protocols · Account abstraction · ZK proofs · Light clients · Stablecoins

Product

Full-stack development · Svelte/React · Payments · API integrations · Developer tooling

Recognition & Writing

- Recipient of two Base Builder Grants for building Untron.
- Technical writing referenced by Ethereum.org and republished/cited by Gate.com Learn, Cointelegraph, and ForkLog.
- Published research on Ethereum Research covering trust-minimized Tron/EVM interoperability.
- Former researcher at 2077 Research, author of 20+ Ethereum/EVM technical articles.
- Daimo Universal Addresses smart contracts audited by Nethermind; Untron contracts reviewed independently before mainnet deployments.