

ELLIOTT ALEXANDER

Senior Software Engineer

Full-Stack · Applied AI · Payments & Blockchain Infrastructure

Richmond, VA · (804) 201-6654 · escottalexander@gmail.com · [LinkedIn](#) · [GitHub](#) · [Website](#)

SUMMARY

Senior software engineer with **7+ years** shipping and owning production full-stack software, mostly in payments, blockchain infrastructure, and developer tooling. Shipped software with real stakes: a wallet-recovery tool now behind **hundreds of successful rescues**, a Solidity smart contract upgrading an invoicing system that had processed **\$470M+ in transaction value**, and AI agent tooling with quality standards adopted across teams at the Ethereum Foundation. Combines hands-on TypeScript engineering with technical leadership and education — curriculum used by **10,000+ developers** and hands-on workshops taught worldwide — and genuine care for code quality and test coverage.

EXPERIENCE

Ethereum Foundation · Developer Experience Engineer

June 2025 – June 2026

Tech: TypeScript, Solidity, Next.js, Agent Skills, Context Engineering, LLM tooling

- Built and shipped AI-assisted developer tooling: co-created [ethskills.com](#), an open-source library of ~20 Agent Skills that gives coding agents the context and guardrails needed to build accurately in a complex, high-stakes domain, **measurably improving how reliably AI agents generate working applications**.
- Set and enforced the **organization-wide quality bar for Agent Skills**, partnering with three teams to bring their Skill collections up to standard and leading cross-team efforts to make developer tooling more discoverable (technical leadership across teams without a management title).
- Championed an **AI-first strategy** for the team, influencing the organization to adopt AI tooling as the primary lever for lowering barriers to entry for developers and shaping roadmap priorities accordingly.
- Established **authoritative public documentation** on emerging development patterns, improving the quality of knowledge sources relied on by both engineers and AI models across the ecosystem.
- Created **three new advanced Solidity challenges** (Oracles, Over-collateralized Lending, Stablecoins) for the [Speedrun Ethereum](#) curriculum (**10,000+ developers**) and refreshed core challenges, including Tokenization, the introductory challenge with **5,500+ completions**.
- Taught **8 hands-on developer workshops** to audiences of 15–80 worldwide (including the Universities of Cambridge and Waterloo), taking participants from zero to their first deployed application.

BuidlGuidl · Full Stack Software Developer

Part-time Sept 2021 – Apr 2024, then full-time through June 2025

Tech: TypeScript, JavaScript, Next.js, Solidity, MongoDB

- **Led a team** building the [Ethereum Tech Tree](#), a structured set of intermediate-to-advanced Solidity challenges that gives developers a guided path to mastering smart-contract development.
- Designed and built [HackedWalletRecovery.com](#), a tool that rescues assets from compromised wallets by submitting recovery transactions privately so attackers' automated bots can't intercept them. Now behind **hundreds of successful recoveries**, it turns an expert-only, high-stakes process into a guided self-serve flow.
- Created the **Impact Calculator**, a prototype that scored the real-world impact of open-source projects so funding could be awarded on measurable results, helping shift the Optimism Foundation toward **data-driven grant decisions**.

BitPay · Back End Engineer

Feb 2022 – April 2024

Tech: TypeScript, Node.js, Solidity, MongoDB, Docker, Mocha

- Shipped a new Solidity invoicing smart contract that fixed a bug blocking certain token (ERC-20) payments on a contract that had processed **\$470M in transaction value**, then added every supported token to the test suite for **precise, regression-proof coverage**.
- Strengthened core payment infrastructure reliability: built tooling to recover stuck transactions across different blockchain architectures, plus a **ledger-validation service requiring agreement across multiple independent nodes** to keep corrupted data out of financial records.

- Core contributor to **Bitcore**, the open-source monorepo providing a standardized payments API across multiple blockchains; added Polygon support and refactored the codebase so **new chains could be integrated with far less engineering effort**.
- Reduced wallet-supporting database storage by **70% across multiple blockchains**, cutting infrastructure cost and improving performance.

Devnext · Full Stack Software Developer

Jan 2019 – Feb 2022

Tech: TypeScript, JavaScript, Angular, C#, SQL

- Built self-serve tooling that let non-technical staff create custom database queries without engineering assistance, **eliminating a recurring bottleneck** that had tied up engineers on ad-hoc data requests.
- Maintained and improved dozens of business applications, building **ETL pipelines** that gave teams direct access to business data and a **cross-database audit viewer** that gave the team one place to trace data across previously siloed systems.
- Shipped a public-facing Angular app that **streamlined how an organization recruited and coordinated volunteers**, and extended its email-campaign platform with SMS to reach supporters on a new channel.
- Drove the team's migration from TFS to Git, **establishing the branching and code-review practices** that cut release risk and improved day-to-day collaboration.

SELECTED PROJECTS

Claude Code Session Explorer · Open-source npx utility · [GitHub](#) · [NPM](#)

- Open-source npx tool that analyzes Claude Code sessions to measure whether a skill or MCP server is steering the agent effectively, surfacing context composition, the **token cost an integration adds**, and where it helps or bloats the agent's work. Gives developers a **data-driven way to optimize AI coding-agent performance**.

Human-in-the-Loop Transaction Approval · Open-source npx utility / Agent Skill · [GitHub](#) · [NPM](#)

- Open-source npx utility and Agent Skill that lets an AI agent hand a fully-formed transaction to its owner for review and approval in a local browser wallet, **ensuring the agent never holds a private key**. Demonstrates security-first design for autonomous agents and is invocable directly by coding agents.

How Was My Wallet Hacked? · Web app · [Website](#) · [GitHub](#)

- Web app that walks crypto-wallet hack victims through a guided ~15–20 question diagnostic to pinpoint how their wallet was most likely compromised, then **teaches the security practices to prevent a repeat**.

CORE SKILLS

AI Engineering Agent Skills / SKILL.md authoring · context engineering · prompt engineering · coding agents (Claude Code, OpenClaw, Hermes) · MCP

Developer Experience & Platform Internal developer tooling · developer productivity · SDK / CLI tooling · platform tooling · technical curriculum & education · open-source maintenance · technical leadership

Languages TypeScript · JavaScript · Solidity · SQL · C# · HTML / CSS

Frameworks & Runtime Node.js · Next.js · React · Angular

Infrastructure & Data Docker · CI/CD · MongoDB · SQL databases

Testing & Quality Mocha · automated test suites · code review & quality standards

Domain Payments & financial infrastructure · Ethereum / EVM · smart contracts · cryptography concepts

EDUCATION

Thinkful Coding Bootcamp · Computer Software Engineering

Fall 2018

- Completed a 6-month software-engineering bootcamp in **half the time** on the strength of three years of prior self-teaching; focused on JavaScript, Node.js, MongoDB, SQL, React, Redux, and **algorithms & data structures**.