

Robert Chyko

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Principal Software Engineer & Tech Lead

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Chalfont, PA (Philadelphia metro) | Open to Remote/Hybrid/On-Site/Relocation

Engineering leader with 20 years experience solving complex problems with software. The last 11 years in financial technology, most recently as Tech Lead for Fidelity Digital Assets, where I directed architecture across three distributed squads for an institutional wallet platform custodying \$40B+ in crypto. Angular and TypeScript at scale, with recent production work in Flutter, Firebase and server-side AI pipelines.

TECHNICAL SKILLS

- **Languages:** TypeScript, JavaScript, Dart
- **Frontend:** Angular, RxJS, NgRx, Flutter, OpenFin, responsive web applications
- **Backend & Cloud:** Node.js, Firebase (Google Cloud Functions, Firestore, Authentication, Cloud Storage), AWS, REST APIs
- **AI & Machine Learning:** Claude Code, OpenAI API, Vercel AI SDK, agentic development workflows
- **Testing & Quality:** Unit, widget and integration testing, automated test strategy, code review, Jest, Vitest, Playwright
- **DevOps & Tooling:** Nx, Jenkins, GitHub Actions, Fastlane, Git, GitHub, SonarQube
- **Practices:** Agile at Scale, Scrum, PI Planning, Jira, Jira Align, technical mentorship

PROFESSIONAL EXPERIENCE

Bass Thumb AI (Independent Venture)

March 2026 - Present

Lead Engineer & Technical Owner

bassthumbai.com

- Sole engineer on a consumer fishing app, taken from an exported low-code prototype to a production release on the App Store and Google Play - Flutter and Dart on iOS and Android, Firebase and TypeScript Cloud Functions on the backend, a Flutter Web admin console, and 2,000+ automated tests.
- Shipped a server-side AI pipeline across five product surfaces using the OpenAI API and Vercel AI SDK, with schema-validated structured output, automatic model fallback, per-user token budgets and paid entitlement tiers.
- Built the GitHub Actions CI/CD pipeline through to signed Fastlane store releases, and used Claude Code as the primary development environment - encoding repository conventions into agent runbooks, custom skills and MCP integrations.

Fidelity Investments

October 2014 - December 2025

Principal Software Engineer - Fidelity Digital Assets (Wallet Team) April 2022 - December 2025

- Led frontend architecture for the institutional hot and cold storage wallet platform custodying \$40B+ in Bitcoin, Ethereum, Solana and Litecoin, as well as the FIDD stablecoin - an Angular and TypeScript application with RxJS and NgRx for state management, covering keyset and wallet creation, approval flows and role-based access, transfers, transaction history, smart contract and stablecoin support, real-time balance monitoring and alerting, and user administration.
- Directed technical strategy and oversaw architectural decisions across 3 globally distributed squads.

- Set the review standard across 3 independently shipping codebases, establishing shared Angular patterns and a common component library that kept them consistent without central gatekeeping.
- Mentored 10+ engineers on the wallet team and ran a biweekly cross-squad engineering forum, raising the review bar rather than policing it.
- Owned the plan for quarterly Program Increment planning, sequencing dependencies across three squads and committing the release train's frontend scope.
- Collaborated with Product team, UX team and end-users to translate complex business requirements into a prioritized technical backlog.

Principal Software Engineer & Product Owner - Core Brokerage *December 2020 - April 2022*

- Joined the Operations Workstation team as a Tech Lead to engineer a modern desktop-enabled Brokerage Operations Workstation platform using OpenFin.
- Transitioned to Product Owner leading a squad of 10 associates.
- Worked with Product, Strategy and UX teams to design a platform capable of migrating existing capabilities off of legacy mainframe systems.

Tech Lead - Fidelity Digital Assets (Trading Team) *May 2018 - December 2020*

- Developed the Trading web app in Angular and TypeScript for institutional clients to buy and sell Bitcoin. Included realtime price charting, order entry and order management, streaming order book.
- Developed the internal Exchange web app that handled trading operations functions related to liquidity providers, enabled assets, order routing, etc.

Lead Developer - Fidelity Centralized Electronic Trading *December 2016 - May 2018*

- Led the development effort modernizing a large suite of legacy Execution Services applications into Angular web apps.

Lead Developer - Capital Markets Prime Services *October 2014 - December 2016*

- Led the update of the main customer facing application in Prime Brokerage.
- Drove the effort to establish a then-modern frontend developer workflow with linting, live browser reloads, automated testing framework, code minification, and bundling.

Cynergy (acquired by KPMG, March 2014) *May 2010 - September 2014*

Senior Associate, Advisory - Digital and Mobile

- Built touchscreen and kiosk applications for Walmart, Volkswagen of America, and a national tire retailer.

Earlier: Engineering roles at Andromeda Systems, Cynergy and Optical Image Technology *2004 - 2010*

EDUCATION & CERTIFICATIONS

- **B.S. Information Sciences and Technology**, The Pennsylvania State University 2000 - 2004
 - Degree Focus – Information Systems: Design and Development
- **Blockchain Essentials**, eCornell - June 2023
- **AWS Certified Cloud Practitioner**, Amazon Web Services - July 2021
- **ScrumMaster**, Scrum Alliance - July 2014