

London, United Kingdom
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Ryan Cassidy

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Founding engineer and hands-on technical leader with 11 years of experience building fintech and AI products for early-stage and YC-backed companies. Built lending products that originated \$35M, treasury infrastructure connecting 2,000+ banks, and production AI systems.

EXPERIENCE

Consultant London, UK	Self-Employed	April 2026 - Present
Consulted for Prop Sustainable to build a solar sales intelligence platform combining property, energy, ownership, LiDAR, and solar resource data to qualify residential and commercial rooftops, identify decision-makers, and automate outreach.		
Co-Founder & CTO London, UK	SpendPilot	May 2025 - April 2026
- Built a bidirectional QuickBooks integration that ingested financial context for AI spend analysis and wrote categorised costs back to the general ledger. - Built AI spend-audit tooling that analysed model selection, prompt caching, and batch processing to identify optimisation opportunities from usage data. - Built automated spend-analysis workflows with Mastra and eval suites to measure accuracy and reliability across customer scenarios.		
Founding Engineer London, UK	Round Treasury	Jan 2024 - May 2025
- First full-time engineering hire at a treasury management fintech; worked with the founders to define the architecture and technical direction for a platform managing millions in startup funds. - Designed and built multi-bank aggregation system connecting 2,000+ banks via Open Banking APIs, providing real-time consolidated balance views and eliminating manual reconciliation across multiple banking portals. - Architected Vault product enabling automated fund distribution across 30+ UK banking partners to maximize FSCS deposit protection (£85k per institution), implementing allocation algorithms and compliance rule engines. - Built treasury yield optimization features integrating with BlackRock money market funds, implementing blended yield calculations, liquidity forecasting, and automated sweep logic for idle cash management. - Delivered product demos to prospective customers and gathered feedback from founder and finance team users to iterate on core platform features. - Built type-safe APIs with runtime validation using TypeScript, tRPC, and Zod, with comprehensive error handling across distributed services.		
Senior Software Engineer London, UK (Contract)	Searchland	Aug 2023 - Dec 2023
- Built an LLM-powered research tool that reduced planning-authority analysis from hours to minutes by ingesting, indexing, and summarising local planning documents. - Designed and implemented search infrastructure using Elasticsearch, integrating into existing monorepo to enable semantic retrieval across thousands of planning authority documents with sub-second query performance. - Integrated government data sources (HM Land Registry, Companies House, Environment Agency) to build interactive map layers and housing data visualizations for property developers and land buyers.		
Founding Engineer San Francisco, US (Contract)	Santé (YC S23)	Dec 2022 - Aug 2023
- First engineering hire at YC-backed startup; built core infrastructure, frontend, and backend using TypeScript and tRPC with third-party API integrations. - Rapidly prototyped and shipped features in 1-2 week cycles based on direct feedback from NYC store deployments, iterating on inventory, distributor management, and payment systems.		

- Grew and led the engineering team from one to five; partnered with the founders on product strategy and contributed to a \$2.1M seed raise after YC Demo Day.

Senior Software Engineer
Miami, US (Contract)

Novo

Oct 2020 - Dec 2022

- Designed and built Novo Funding from inception across three credit products—line of credit, merchant cash advance, and invoice financing—originating \$5M within five months and \$35M overall.
- Architected underwriting decision engine integrating real-time transaction data, cash flow signals, and third-party credit data to automate risk assessment for 3,000+ small business applicants.
- Built internal servicing tools for collections and repayment management, including automated payment scheduling, delinquency tracking, and repayment waterfall logic.
- Scaled lending team from 1 to 4 engineers (~20 total team size including product, compliance, and operations), contributing to \$125M credit facility from Victory Park Capital.
- Partnered with compliance, fraud, and risk teams to implement KYC/AML checks, transaction monitoring, and regulatory reporting; resolved complex ledger reconciliation issues in production environment handling \$1B+ in lifetime transactions.

Earlier Experience

2014 – 2020

- **Software Engineer, Tridaz s.r.o** (Bangkok): Led modernization of legacy PHP applications; built custom e-commerce solutions and payment integrations, increasing conversions by ~15%.
- **Consultant** (London): Built and maintained e-commerce platforms; integrated high-risk payment solutions on WooCommerce, Magento, and Shopify.

PROJECTS & OPEN SOURCE

Open Source Security Research - 2026

- **Linux and infrastructure security:** Discovered a TOCTOU race exposing root-only files and authentication material, then chained it with a second vulnerability for root code execution on multiple Linux distributions.
- **Operating-system supply chains:** Found eight issues involving privilege escalation, package trust, ISO integrity, hardware access, and denial of service in a Linux distribution.
- **Developer platforms and web infrastructure:** Found authorization, cache-isolation, and artifact-verification flaws affecting source-code hosting, cloud deployment, and a widely used web framework.
- **Publishing and CMS ecosystems:** Built working reproductions for stored XSS and private-data disclosure across several production WordPress plugins.
- **AI-enabled development tooling:** Found an MCP symlink bypass that exposed files outside client-declared filesystem roots.
- **Cross-platform file transfer:** Found PIN-independent, unauthenticated memory exhaustion in a shared request parser; a 128 MiB request increased RSS by approximately 260 MiB.

TECHNOLOGIES

Languages: TypeScript, JavaScript, Python, SQL, PHP

AI/LLM: OpenAI API, Anthropic API, LangChain, Mastra, Evalite, Pinecone, Chroma, Elasticsearch

Frameworks & Libraries: Next.js, React, Node.js, tRPC, Zod, Prisma, Drizzle, FastAPI

Runtimes & Tooling: Bun, Node.js, pnpm, Turborepo, Vitest, Playwright

Infrastructure: AWS (Lambda, RDS, S3, SQS), Vercel, PostgreSQL, Redis, Docker, Terraform

Integrations: Open Banking APIs, Xero, QuickBooks, Stripe, Plaid, Twilio, third-party KYC/AML providers

EDUCATION

Kingswood School - A-Levels in Mathematics, Physics, Computing (2011–2013)