

Casey Charlesworth

Senior Full-Stack Engineer · Los Angeles

Senior full-stack engineer in Los Angeles: payments, marketplaces, AI pipelines and Solana, in TypeScript, Rust and Solidity.

EXPERIENCE

2025–now	Senior Software Engineer, Consultant · Lazer Technologies Clients: SwishX, Glacis Labs, Sorare, House of Pranksy
2026	Freelance Shopify developer · Independent Wildtide
2025–now	Author and maintainer, Cinder Wallet · Open source Cinder Wallet: a self-custodial Solana wallet extension (MIT, not audited)
2023–2025	Software Engineer · Gavel (later acquired by Relativity, 2026) Billing and entitlements, the document engine, AI variable review
2023 (approximate dates)	Founding Engineer · Indie-Pop Coll3ctibles
2022–2023	Freelance Solana developer · Independent White-label raffles, wheels, staking; Catalina Whale Mixer holder portal + Floating staking (from late summer 2022); Orca Position Simulator
2021–2022	Software Developer (contract) · DispenseFirst Part-time
2019–2023	Software Engineer → Senior Software Engineer · West Monroe Con Edison, Coinbase NFT beta, Polaris, DevOps for 30+ repos

SELECTED PROJECTS

SwishX: a real-money collectibles marketplace, built end to end

I architected and built SwishX via Lazer: a funded wallet, a sealed-pack reveal and a real graded card shipped to the buyer, on a double-entry ledger.

- Double-entry Postgres ledger, append-only enforced by a database trigger
- Oversell-proof purchase transaction fronted by a Redis Lua script
- Provably fair odds engine (SHA-256 into SplitMix64, replayable pulls)
- GPT-4o Vision slab-label OCR treated as untrusted input

Glacis Airlift: the Solana side of a cross-chain bridge

Via Lazer, I owned Airlift's Solana integration layer: one SDK over Wormhole NTT and LayerZero OFT, fee quotes that match execution, and a transfer that fits in 1,232 bytes.

- One quote() and one send() over Wormhole NTT and LayerZero OFT, packaged as a standalone TypeScript package
- Address Lookup Table compression to fit transfers inside Solana's 1,232-byte v0 limit
- Fee quotes that match the executed cost, read from on-chain quoters instead of constants
- Token configs, scrapers and bulk on-chain registration, plus the full developer docs

Orca Position Simulator: a concentrated-liquidity PnL simulator

As a freelancer I built the Position Simulator in Orca's pools UI, so liquidity providers can see PnL across a price range before they deposit.

- Built the Position Simulator that ships in Orca's pools UI
- A Net PnL curve across the chosen price range, before any deposit (per Orca's docs)
- Token mix, estimated yield, time in range, impermanent loss and LP vs HODL in one panel (per Orca's docs)
- Works with no wallet connected (per Orca's docs)

Gavel: billing, a document engine and AI review for legal automation

At Gavel I built billing and entitlements end to end, owned the document code generator every workflow runs through, and built the AI variable-review UI.

- Billing and entitlements end to end: React paywalls, a NestJS tier guard, OPA policy checks and a Stripe webhook Lambda
- Owned the Python/docassemble code generator every workflow runs through
- The Gavel AI variable-review UI, with PDF and variable annotations kept in sync both ways
- The questionnaire builder's field-type system, and the Mantine v6 to v7 migration

White-label Solana utilities for NFT communities

Raffles, spin-the-wheel and staking I built once and re-skinned for collection after collection, including Baby Ape Social Club, self-served through a headless CMS.

- Token- and NFT-gated raffles, self-served by each community through a Prismic CMS
- Spin-the-wheel with spin credits and a scheduled job that redistributes failed payouts
- Staking moved from Gem Farm to a custom pair-multiplier app, then to white-label Cardinal staking with pNFT support
- One codebase, re-skinned for collection after collection

SKILLS

Languages	TypeScript, JavaScript, Rust, Python, Solidity, SQL
Frontend	React, Next.js, Vue.js, Tailwind, Mantine, Storybook
Backend	Node.js, NestJS, Express, PostgreSQL, MongoDB, Firebase
Blockchain	Solana (Anchor, Metaplex), Ethereum (wagmi/viem, Foundry), Cross-chain bridges (Wormhole, LayerZero)
Cloud and DevOps	GCP (Cloud Run, Cloud SQL, Pub/Sub), AWS (Lambda, S3, EC2), Docker, GitHub Actions, CI/CD
AI and payments	OpenAI / GPT-4o Vision, LLM integration, Stripe / Stripe Connect

Security review and testing	Pre-audit smart-contract review, Mainnet-fork tests, Vitest, Playwright, Coverage gates
Commerce and CMS	Shopify (Liquid, metaobjects, Remix apps), Sanity, Prismic, No-code page builders

EDUCATION

B.E. Computer Science, University of Illinois Chicago (Minor: Computer Engineering)	2019
Professional Certificate, Blockchain Fundamentals, UC Berkeley	2022