

Olena Domchevska — Portfolio

Mode Trade

One-liner:

A native perpetuals DEX for trading crypto perps onchain, with AI trading agents that run strategies on their own.

Short description:

Mode Trade lets users trade crypto perpetuals fully onchain. It also hosts AI trading agents, including a Synth-powered AI Quant, that run strategies on the platform autonomously. It is live in production with more than \$50M in trading volume.

Highlights:

- **Trading interface:** order execution, positions, PnL and fee tiers.
- **Multi-chain wallet auth:** sign-in across both EVM and Solana wallets.
- **Dashboards:** portfolio and leaderboard views for tracking performance.
- **AI agents:** features for the platform's autonomous trading agents, including the Synth-powered AI Quant.
- **Impact:** live in production with \$50M+ trading volume.

Tech stack: EVM · Solana

Synth Dashboard

One-liner:

A decentralized network of AI models that gives traders probabilistic forecasts for crypto markets.

Short description:

Synth generates synthetic price-path data to simulate a wide range of market conditions. Traders and DeFi agents use it for probabilistic forecasts and predictive intelligence on crypto markets. It is live in production with about 1,000 monthly active users.

Highlights:

- **Synth Terminal:** an LLM assistant built on the Claude SDK with tool use, streaming, sandboxed code execution and model routing.
- **Cost optimization:** cut the assistant's token costs by 30%.
- **Analytics dashboard:** a subscription analytics dashboard for users.
- **Billing:** an end-to-end Stripe billing pipeline.
- **Impact:** live in production with ~1,000 monthly active users.

Tech stack: Claude SDK · Stripe · Bittensor

Saga: Original History

One-liner:

An iOS app that tells history as short audio stories.

Short description:

New users take a personalization quiz and then follow a chapter-based story path. The app has a persistent audio player, favorites and viewing history, with content in English, Spanish and Portuguese. I built and shipped it solo, from architecture to App Store release.

Highlights:

- **Subscriptions:** RevenueCat with a paywall driven by live App Store pricing.
- **Identity:** an anonymous-first model with Supabase and Sign in with Apple.
- **Content:** a localized Contentful pipeline in three languages.
- **Audio:** a persistent player with lock-screen controls.
- **Solo build:** architecture, development and App Store release.

Tech stack: React Native · Expo · RevenueCat · Supabase · Sign in with Apple · Contentful

Tickwhy

One-liner:

An AI-powered market explainer that shows why a stock or index moved, not just that it did.

Short description:

Tickwhy flags the unusual price moves of any US stock or major index. It breaks each one into market, sector and company-specific parts, and lines it up with the news and earnings from that day. An AI agent built with LangGraph and Claude explains the biggest moves in plain language and cites the articles it used. For indexes, a sector breakdown shows which parts of the economy drove the market.

Highlights:

- **Interactive charts:** TradingView charts with unusual-move markers, earnings dates and a detailed breakdown for any day you click.
- **Statistical attribution:** each move is split into market, sector and company parts using a regression on market and sector ETFs. Index moves are split across 11 sectors, with sector weights estimated from the price data itself.
- **AI agent:** a multi-step LangGraph workflow explains the biggest moves in parallel with structured, source-cited output. Results stream live and runs are traced in LangSmith.
- **Built for free-tier data:** rate limiting, caching, and per-visitor and daily limits on AI usage keep API costs under control.
- **Design:** dark and light themes, fully responsive.

Tech stack: Next.js · TypeScript · Tailwind CSS · FastAPI · LangGraph · Claude API · LangSmith · Vercel · Railway