Ethen Pociask

Senior infrastructure engineer at Eigen Labs working across protocol security, blockchain infrastructure, distributed systems, and AI agent infrastructure.

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6+ years engineering production systems · 200+ onchain assets monitored · $1B+ rollup integrations supported · 3× ETH hackathon winner

EXPERIENCE

Senior Infrastructure Engineer, Eigen Labs

Apr 2024 — Present

- Hardened EigenDA protocol and smart contracts, fixed vulnerabilities, and deployed protocol features while managing engineering initiatives for one year
- Managed the EigenDA Arbitrum stack across Layr-Labs/nitro, nitro-contracts, and nitro-testnode-eigenda-v1, spanning core Nitro, EigenDA-modified contracts, and a complete local protocol environment
- Built Stage 1 decentralization support for the EigenDA Arbitrum stack with optimistic fraud proofs, and onboarded two Orbit chains onto the integration
- Built orbit.eigenda.xyz, a self-serve launcher for spinning up Arbitrum Orbit chains backed by EigenDA on testnet in under 10 minutes
- Designed versioned certificate and verifier routing for forward-compatible upgrades and rollup-specific security parameters, including required quorums and confirmation thresholds
- Built a multi-agent local validation system for L3->L2 and L2->L1 permutations, including BoLD and AnyTrust fallback, cutting analysis from several days to a few hours
- Built GitHub Flashlight, a multi-agent system that reverse-engineers arbitrary codebases into cited component analyses, a unified knowledge graph, and synthesized architecture documentation
- Proposed a unified DA server across EigenDA rollup integrations, unblocking more than $1B in TVS
- Built the architectural compiler for Yukon, Eigen Labs' public benchmark-challenge platform: a build step that compiles the repository into a system map, checks it against declared invariants, and fails the build when code and architecture disagree
- Retired unused Yukon subsystems (an authoring assistant, a judge service, an execution runtime, and two CLI distributions), a net reduction of about 78,000 lines
- Built the Darkbloom Architecture Explorer as an interactive system architecture and guided protocol walkthrough while working on distributed inference for Darkbloom

Senior EVM Engineer, Shadow

Dec 2023 — Apr 2024

- Architected and productionized a distributed Ethereum RPC API handling 100+ reqs/second with minimal latency
- Production hardened an internal EVM environment and identified key security vulnerabilities in execution
- Established robust monitoring and resiliency routines for internally hosted node integrations

Senior Protocol Security Engineer, Coinbase

Apr 2023 — Dec 2023

- Designed and operationalized security assessment frameworks for novel smart contract execution environments
- Built an in-house monitoring service for real-time threat detection on OP Stack blockchains; worked closely with the Base protocol team
- Designed interview pipelines, trained new hires, and led daily meetings to upskill and unblock coworkers
- Catalyzed creation of internal smart contract monitoring — full coverage of 200+ assets across blockchain protocols

Blockchain Security Engineer, Coinbase

May 2021 — Apr 2023

- Designed and operationalized risk analysis frameworks for analyzing onchain tokenized assets for secure listings on Coinbase exchange
- Built and managed APIs for Solidify, then upskilled a team of 6 analysts to use the smart-contract security analysis tool

Product Engineering Intern, Lucid

Jun 2020 — May 2021

- Migrated AWS data streams from Kafka to Kinesis in a Java ETL microservice, saving ~$60K/year
- Dockerized legacy MSSQL database for improved developer experience
- Assembled Go data processing microservice with layered REST API using Redis, DynamoDB, S3, and Kinesis

Cofounder, Volatrade

Nov 2019 — May 2021

- Built an end-to-end crypto trade simulation system
- Built an ML pipeline for training, deploying, and integrating TensorFlow models
- Operated simulation strategies driven by model outputs

SELECTED WORK

Harness + Portal
AI agent infrastructure

Built and operate a self-hosted agent system on Apple Silicon, plus its open-source macOS and iOS operations console — tool execution, parallel subagents, durable memory, multi-gateway sessions, knowledge graphs, interactive HTML artifacts, skills mgmt, runtime ontologies, and learning tools.

View Portal

OP Stack threat monitoring
Protocol security

Built real-time monitoring used in production to secure Base, then helped expand internal coverage across 200+ onchain assets.

Read the Pessimism post

Arbitrum Orbit × EigenDA
Rollup infrastructure

Managed the EigenDA Arbitrum stack across custom Nitro core, contracts, and local testnode repositories. Built the self-serve chain launcher, designed forward-compatible verifier upgrades, and built multi-agent validation for L3->L2 and L2->L1 permutations — including BoLD and AnyTrust fallback — reducing analysis from several days to a few hours.

Launch a chain · Read the lifecycle spec · Nitro core · Nitro contracts · Local testnode

Yukon architecture observatory
Developer infrastructure

Built the architectural compiler and observatory for Yukon, Eigen Labs' public benchmark-challenge platform. The repository compiles into a system map on every change; invariants and a ratchet fail the build when code and architecture disagree; model-written explanations are bound to the source lines they cite; and a history view replays the map commit by commit.

Read how it works · Visit Yukon

GitHub Flashlight
AI code intelligence

Built a multi-agent system that reverse-engineers arbitrary codebases into cited component analyses, a unified knowledge graph, and synthesized architecture documentation.

View on GitHub

Darkbloom Architecture Explorer
Protocol visualization

Built an interactive system architecture and guided protocol walkthrough for Darkbloom, with graph and system-flow views that make runtime services, applications, transports, and data movement inspectable.

Explore the architecture

EDUCATION

BS Computer Science
2017 — 2021

University of San Francisco

Minor in Mathematics. Algorithmic trading and machine learning.

AWARDS & HACKATHONS

ETH New York 2023 Hackathon Winner
ETHGlobal · Sep 2023

Automation tool for the Arbitrum Stylus smart contract platform

ETH Denver 2023 Binance Hackathon Winner
ETH Denver · Feb 2023

Smart contract risk automation tool PoC — real-time threat detection via user wallet

ETH Denver 2023 NEAR Hackathon Winner
ETH Denver · Feb 2023

Light client proofs via storage proofs — added accessor logic to state trie traversal

ETH San Francisco 2022 Hackathon Participant
ETHGlobal · Oct 2022

Novel implementation of TSTORE and TLOAD opcodes on op-geth; hand-wrote EVM bytecode for testing

ETH Online 2022 Hackathon Participant
ETHGlobal · Dec 2022

Hacked pre-bedrock OP Stack to settle calldata batches and state commitments on FileCoin via FEVM