# VIRAJ BHARTIYA

Mumbai, Maharashtra, India — +91 8485837871 — vlbhartiya@gmail.com linkedin.com/in/viraj-bhartiya — virajbhartiya.com

# PROFESSIONAL SUMMARY

Backend Engineer with strong systems focus and open-source experience at Protocol Labs. Built scalable infrastructure with Go and Rust, and orchestrated distributed compute workflows. Deeply engaged with Web3 ecosystems, implemented smart contracts, optimized on-chain transactions, and integrated decentralized storage and compute systems. Strong understanding of protocol-level architecture, gas abstraction.

#### **EDUCATION**

### B.Tech, Computer Engineering

K.J. Somaiya College of Engineering, Mumbai

# TECHNICAL SKILLS

Languages Go, Rust, TypeScript, JavaScript, Python, DartFrontend React, React Native, Flutter, TailwindCSS

Backend Node.js, Express.js, PostgreSQL, gRPC, REST, WebSockets

Blockchain Solidity, Hardhat, Ethers.js, Coinbase Base, IPFS

Tools Redis, NGINX, Git, Ollama, PostgreSQL

#### SYSTEMS PROJECTS

### Parity Protocol

github.com/theblitlabs/parity-protocol

- Built full orchestration layer for LLM inference and federated training across 20+ Dockerized runners.
- Cut model convergence time 32% using parallel aggregation and dynamic runner allocation.
- Integrated wallet-layer logic using paymaster-inspired design for gas abstraction and cross-chain execution.

### MapReduce in Go and Rust

github.com/virajbhartiya/map-reduce

- Master-Worker compute framework using gRPC + concurrency primitives; achieved 3.2x parallel speedup on 10-node testbed.
- Implemented retry + failure handling logic for partial job loss scenarios under simulated node churn.

#### Trading Engine

github.com/virajbhartiva/Stock-trader-Bot

- Backtested RSI/EMA crossover strategy on equities; yielded 12.4% return in 6 weeks, beating benchmark by 7.3%.
- Built interactive CLI with pandas-based metrics and matplotlib charts for trade insight visualization.

# WORK EXPERIENCE

# Open Source Engineer

Protocol Labs — Remote

Sept 2024 - Present

- Contributed to production-grade Filecoin tooling: Lotus (Go) and Forest (Rust), with 15+ PRs merged.
- Built and maintained 'PDP Explorer', a Go-based proof validator that verified over 2M proofs daily.
- Extended Synapse SDK to support storage deal negotiation, retrieval, and task orchestration in TypeScript.
- Led async collaboration across Filecoin teams; triaged issues, reviewed PRs, and co-authored improvement RFCs.

# Lead Software Engineer

MGEPL — Mumbai

March 2024 - Present

- Built a tenant-based Inventory Management SaaS used by multi-brand retailers to track stock, manage vendors, and reconcile billing across locations.
- Engineered an end-to-end order flow system with status tracking, delivery SLAs, and real-time updates via Web-Sockets.

# Founding Software Engineer

TopClub — Remote

Jan 2024 - Sept 2024

- Built scalable React Native app with real-time updates; served 10K+ monthly active users.
- Designed REST APIs and Lambda functions on AWS; handled 100K+ weekly requests under 300ms median latency.
- Aggregated data from 15+ third-party APIs; implemented auto-repair pipelines improving sync consistency by 28%.

# HACKATHON HIGHLIGHTS

EthIndia 2024 — Built decentralized file storage with on-chain proof gen; selected from 3K+ developers.

Unfold 2024 — GitHub-integrated crypto bounty protocol; won 1st out of 120+ teams.

**Prakalpa 2025** — National engineering project competition; software track winner.