

Atul Agarwal

Protocol Engineer & Builder

atulagarwal893@gmail.com · x.com/0xshinobii · atulagarwal.dev · Goa, India (Remote)

Summary

Started in chip design at MediaTek, taught myself software engineering, and jumped to DeFi in 2021. Co-founded two protocols from zero to production — a perpetual futures exchange on Avalanche and a leveraged lending protocol on Aptos that peaked at \$7M TVL. The common thread: going deep on hard problems — porting Newton's method solvers to Solidity, designing a custom Avalanche Subnet where validators act as order matchers, or picking up Move to build on an early ecosystem. Currently exploring the intersection of AI and finance — the agent economy, autonomous economic actors, and machine-to-machine payment rails.

Experience

Moar Market — Founder

2024 – Present

Leveraged lending protocol on Aptos with integrations across Hyperion, Tapp, and Panorama.

- Live protocol with \$2M TVL, peaked at \$7M in January 2026
- Owned all Move smart contracts: collateral vaults, interest rate models, oracle integrations, liquidation logic
- Co-built backend: indexer, liquidator bot, risk monitoring, and API layer
- Defined risk parameters, collateral factors, and liquidation incentives for multi-asset markets

Hubble Exchange — Co-Founder & Protocol Engineer

2021 – 2024

Decentralized perpetual futures exchange on Avalanche — evolved from vAMM (V1) to DLOB on custom Subnet (V2).

V2: Decentralized Limit Order Book (DLOB) on Avalanche Subnet

- Owned all Solidity smart contracts for order-book DEX on custom Avalanche Subnet with validators as order matchers
- Built cross-chain asset bridge using LayerZero (lock-mint mechanism) for L1-to-subnet transfers
- Co-built liquidator bot, order-matching service, and monitoring infrastructure

V1: Virtual AMM Perpetuals

- Implemented CurveCrypto invariant in Solidity — Newton's method solver for on-chain price computation
- Designed margin engine, funding rate mechanism, and multi-collateral vault system

DefiDollar — Smart Contract Engineer

2021

Smart contract development for a stablecoin index protocol on Ethereum — aggregated yield-bearing stablecoins into a single diversified token.

Deploy — Side Project

2026

MVP for an automated grid trading bot on Hyperliquid perpetual futures.

- Event-driven TypeScript engine with RabbitMQ, PostgreSQL, and WebSocket-based order lifecycle management

MediaTek — Chip Design Engineer

2017 – 2020

Designed digital circuits for production SoCs — timing closure, RTL verification, and physical design across multiple chip tapeouts.

Skills

Languages: Solidity (Foundry, Hardhat, EVM internals), Move (Aptos framework, resource model), Rust, TypeScript, Python

Protocol Design: Perpetual futures (vAMM, funding rates, margin systems, liquidation engines), lending & borrowing (leveraged lending, interest rate models, collateral management), DLOB on custom L1/Subnet, AMM invariants (StableSwap, CurveCrypto, Newton's method solvers), cross-chain bridging (LayerZero)

Chains & Infra: Ethereum/EVM, Avalanche (custom Subnets, validator operations), Aptos/MoveVM

Backend & Tooling: PostgreSQL, RabbitMQ, Docker, monitoring; event-driven architecture (WebSocket listeners, message queues, state machines)

Education

Indian Institute of Technology (IIT) Delhi — Master of Technology (M.Tech)

2017

Indian Institute of Technology (IIT) Jodhpur — Bachelor of Technology (B.Tech)

2015

Writing

- [Understanding the Curve AMM: StableSwap Invariant](#) — Newton's method, swap mechanics, bonding curve math
- [Hubble vAMM: CurveCrypto Invariant](#) — extending Curve's invariant to volatile-asset perpetual futures