

Dipendra Pratap Singh

+919695913053 | dipendras953@gmail.com | linkedin.com/in/dipendra | github.com/dipendra

EXPERIENCE

Full-Stack Developer

June 2025 – Nov. 2025

Mioneer Pvt Ltd

Remote

- Built and maintained production web services used by real users.
- Designed backend APIs and database schemas for transactional workloads.
- Debugged and resolved performance and data-consistency issues in live systems.

PROJECTS

Centralized Exchange | Rust, Actix-web, Tokio, PostgreSQL, Docker

Nov 2025 – Dec 2025

- Price-time priority matching with support for partial fills and order cancellations
- Event-driven architecture using Redis pub/sub for real-time system communication
- Service separation between API, matching engine, and order book for scalability and maintainability
- Matching engine designed for predictable performance and correctness under load

CLMM(Concentrated liquidity AMM) | Rust, LiteSvm

Dec 2025 – Jan 2026

- Built a Solana CLMM with tick-based pricing and Q64 fixed-point math
- Implemented zero-copy state using bytemuck to work around Solana's stack size constraints
- Designed on-chain data structures with C-repr alignment for positions, ticks, and liquidity tracking
- Wrote integration tests using LiteSVM covering swaps, liquidity operations, and edge cases

Solana Contracts | Rust, Anchor

Jul 2025 – Sept 2025

- Built multiple Solana programs (Escrow, Staking, Vault, Governance) using Anchor
- Implemented core DeFi primitives including atomic swaps and staking rewards
- Optimized on-chain storage with PDA-based architecture and Token2022 compatibility
- Designed instruction handlers with strict account validation and signer checks

EDUCATION

KIET Group of Institutions

UP, India

Bachelor of Technology - Computer Science and Engineering

Nov. 2022 – May 2026

TECHNICAL SKILLS

Languages: Rust, TypeScript, Java

Frameworks: Anchor, Pinocchio, Next.js, Bun, Node.js

Developer Tools: Git, Docker, Linux, Networking

Core Subject: DBMS, OOPS, Data Structures, Algorithms

POSITION OF RESPONSIBILITY

Kinesis Technical Society | UI/UX Coordinator

January 2024 - December 2024

- Directed UI/UX design and optimization for club projects, ensuring intuitive and engaging user experiences
- Conducted hands-on bootcamps on Figma and UI/UX principles for 50+ 1st and 2nd-year students.
- Designed user interfaces and promotional materials for flagship events, including **Innotech** and **NASA Space Apps Challenge Hackathon**.