Rachit Sharma

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Summary

Rust engineer with 4 years of experience building **distributed services and microservices**, from low-latency async systems to security-critical infrastructure.

Skills

Languages: Rust, Go, Solidity, JavaScript, C/C++

Technologies & Tools: Tokio, gRPC, Kafka, Redis, PostgreSQL, AWS KMS, Kubernetes, Docker, Prometheus, Grafana, perf, cargo-flamegraph, Criterion, tokio-console, tracing

Work Experience

Wasserstoff, Gurugram May 2024 - Present

Software Engineer (Rust)

- Wrote and maintained the **Rust backend** for multiple products, including **background workers** and **transaction signing through AWS KMS**, running in production.
- Profiled backend services with **Linux perf** and **cargo-flamegraph** to find where latency was spent, benchmarked fixes with **Criterion** and **cargo bench**, and tracked **P99 latency** with Prometheus metrics, tracing, and tokio-console.
- Implemented an **MPC wallet with Distributed Key Generation (DKG)** in Rust using **Shamir Secret Sharing** and **threshold ECDSA (t-of-n)**, enabling collaborative signing without materializing the complete private key.
- Launched **RPC/validator infrastructure** for **Gorba Chain**, operating Solana-compatible node services for network access and transaction processing, and developed Solana programs using **SPL Token and Token-2022**.
- Developed a **DEX on Partisia in Rust** with liquidity pools and single- and multi-hop swap execution.
- Created a **Solana fundraising and token platform** in Rust with token creation and on-chain trading via **Jupiter**.
- Delivered **MEU** in Rust, a user-to-user contract-signing platform with **cryptographic signature verification**, document workflows, and custom asset uploads.
- Integrated **LI.FI** cross-chain flows on 3+ chains, serving **$130M+ volume, 236K+ transactions, and 39K+ users**.
- Also authored Solidity: an **ERC-4337** account-abstraction system and multi-chain **ERC-4626**/**ERC-7540** vaults.
- Rust, Solidity , JavaScript, AWS KMS, perf, cargo-flamegraph, Criterion, tracing, tokio-console, Prometheus

Systaldyn, Noida Jan 2024 - May 2024

Software Engineer

- Designed **REST APIs in Rust** for the **Hitachi** project's backend services, collaborated with the blockchain team on smart contract development, and implemented NFT minting on an EVM-compatible blockchain.
- Architected an **intent-based DeFi layer** in Rust to route, swap, and settle cross-chain transactions via relayers.
- Rust, JavaScript, REST APIs, EVM, relayer architecture

Interstate, Remote (San Francisco) Jan 2023 - Dec 2023

Software Engineer

- Engineered core components of Interstate's **Ethereum preconfirmation infrastructure** in Rust/Tokio, targeting ∼**100 ms preconfirmation receipts** ahead of Ethereum's ∼12-second block interval, across validator sidecars, cryptographic signing, MEV-Boost relay infrastructure, and proposer–builder coordination.
- Deployed a **Kafka-based event-streaming pipeline in Rust** for real-time block-builder bid data on Kubernetes, with Prometheus metrics and Grafana dashboards for throughput, latency, and service health monitoring.
- Engineered components of a **multi-region distributed relay**, using **gRPC** for inter-node communication, Redis for shared state and coordination, and lock-free/atomic concurrency for high-throughput async Rust services.
- Contributed Solidity contracts for validator restaking, integrating EigenLayer/URC-based flows and implementing registration, collateral delegation, and verification logic across pluggable restaking backends.
- Rust, Solidity, JavaScript, Kafka, gRPC, Redis, Kubernetes, Prometheus, Grafana, MEV-Boost

Open Source & Achievements

- **Open Source:** **rust-lang/rust**, **tokio-rs/tokio** , **dfinity/ic** and **NVIDIA/cuda-rust**
- **Hackathon Winner:** Won the Meridian hackathon and received a $150K grant for the project.
- **1st Prize:** keyless wallet on Stellar with zk (Groth16) enabled payments

Education

Graphic Era Hill University 2019 - 2023

B.Tech in Computer Science ***GPA: 8.23/10.0***