

proof of work

Vivek Pal

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[LinkedIn Profile](#) | [GitHub Profile](#) | [Portfolio Website](#)

Summary

Yet another software engineer with a strong foundation in Rust and distributed systems. Specialized in building decentralized applications, OS-level software, and peer-to-peer systems. Active open-source contributor with demonstrated experience in system architecture and blockchain technologies.

Technical Skills

- **Primary Languages:** Rust, TypeScript
 - **Systems Programming:** WASM, Linux Kernel Modules, GTK
 - **Blockchain:** Solana, Ethereum, IPFS, Filecoin
 - **Web Technologies:** WebGL, React.js, Next.js
 - **Tools & Platforms:** Git, Linux, Docker, IPFS, Libp2p
 - **Databases:** PostgreSQL, LightSQL, Redis
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NOTABLE PROJECTS

[wIndexer](#) (2024-Present)

Decentralized Data Streaming for Solana

- Solana data streaming engine built on libp2p's gossipsub protocol
- Applying zero-knowledge proofs for efficient state representation

[ShastraOS](#) (2022-2024)

Decentralized Desktop Operating System

- Architected and developed an Arch-based Linux distribution with custom package management
- Implemented Filecoin and IPFS integration for decentralized software package distribution
- Built system-level applications using Rust and GTK for the GNOME desktop environment

- Designed and implemented time-shift backup systems with decentralized storage

GossipRPC (2024)

Distributed RPC Implementation

- Developed a novel RPC system using libp2p's gossipsub protocol for P2P communication
- Implemented resilient message broadcasting across decentralized networks
- Created robust error handling and network resilience mechanisms

Chat p2p (2023)

Peer-to-Peer Communication Platform

- Built a decentralized chat application using Rust, WASM, and Libp2p
 - Implemented secure peer discovery and connection handling
 - Developed efficient message routing and delivery systems
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OPEN SOURCE CONTRIBUTIONS

GNOME Foundation

Open Source Contributor

- Contributed to some gtk components and applications, like gnome-web
- Improvements and some fixes in gtk-rust bindings
- Collaborated with international developer community through GitLab

FOSSCU (2022-Present)

OSS Maintainer

- Lead maintainer for open-source community with 200+ members
 - Contributed to and reviewed Rust-based system utilities
 - Organized workshops and training sessions on systems programming
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PROFESSIONAL EXPERIENCE

IPDM

Rust and Systems Engineer and Founding Member

- Developing high-performance distributed protocols for data retrieval

- Implementing for Solana decentralized data streaming with libp2p gossipsub
- Maintaining working group of 20 people

Cubik

Fullstack Software Engineer

- Implemented Wallet Contexts and Modal
- Worked on UI Components Library

Buidlers Tribe

Web3 Engineer

- Created smart contract implementations for decentralized applications
 - Worked on Data Analysis and Graph protocol
 - Ethereum Contracts and Twitter Bots
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EDUCATION

- B.Tech Computer Science, [IFTM University](#) (2021-2025)
- [Harvard's CS50](#) 2021
- [Helsinki University's](#) Full Stack Open 2021

ACHIEVEMENTS

- Wormhole [Fellowship Program](#) Participant
 - Solana Hackathon Winner ([Solway](#) Project)
 - Active member of [Superteam](#)
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