

I am dev, writing open-source codebase to build a web3 protocol, I have developed cross-platfrom desktop apps. Most of the time worked in companies starting from seed stage to series-A. I have developed and maintained backends serving 500K MAU's, designed infra from nothing to complete CI/CD and cloud managed auto-scaling systems. Currently working on distributed systems, decentralized technologies and some crowdsource side projects.

Skills

C++

Advanced

Solidity

Intermediate

Node.JS

Advanced

Go Lang

Advanced

React.js

Intermediate

JS, HTML, CSS

Advanced

DevOps

Intermediate

Typescript

Advanced

Svelte.js

Advanced

CI/CD

Intermediate

Distributed Systems

Intermediate

Python

Intermediate

Experience

● **Full Stack Platform Engineer (Blockchain) @ Powerloom Protocol**

December 2021 - Present

Building powerloom protocol: Founding engineer developing core web3 protocol, I am implementing distributed systems to aggregate smart contract data from blockchain. I have architected and implemented fault tolerant data aggregation and distribution system while maintaining proof on blockchain.

- writing open-source code aimed as a developer product.
- co-author of whitepaper, writing in-depth documentation and async work collaboration.
- Implement data adapter to fetch and process data from multiple chain like ethereum, polygon and multiple contract like uniswap, sushiswap, quickswap, etc.
- Implemented verification system to check integrity of protocol chain and its data.
- research and implement complex distributed system solutions to work with decentralized tech like IPFS.
- implemented modular & dynamic rate-limiter to interact with blockchain and other distributed systems.

● **Full Stack Developer @ Bitespeed**

August 2021 - November 2021

Architected and headed future core product at company, designed multiple microservices to handle end user realtime chat system. Scale highly available using hasura, AVWS: SQS, SNS Lambda cloud formation and more.

- designed and owned realtime distributed chat-system.
- synchronised huge traffic to respect third-party api service using aws SQS.
- architected central logging and monitoring service watching distributed microservice on aws lambda, EC2 and hasura actions.
- researched and designed several system to plan GraphQL api using aws app-sync and hasura engine.
- written automation to help marketing and customer support team using Puppeteer and google app script.

● **Software Development Engineer @ Winuall**

September 2020 - August 2021

As a core engineer in backend team I designed backend architecture to interact with multiple microservices, while core product still be a monolith. Backend API was serving ~500K MAU, while separately maintaining payment, analytics and notification services. I owned products like analytics which involved communicating requirement with business team to continuously iterate analytics collection and aggregation system.

- architected & developed analytics collection system without affecting(<5%) core product performance.
- Optimised response time on the server-side by 20% by the use asynchronous calls, multiprocessing pipelines, and distributed system architecture to serve multiple users concurrently.
- architected notification microservice to support batching while maintaining low infra cost.
- planned implemented hexagonal architecture for backend reducing 45% time in code maintenance.
- designed & scaled no-sql database to store millions of entry in tables with fast query support.
- initiated unit-testing from scratch and achieved 85% code coverage in 2 months.

● **Intern Full Stack Dev @ SecurityEscape**

January 2019 - March 2020

Worked with application security team to dev-tooling app for security application targeting publicly available data breaches, we gathered patterns in general user password, essentially creating database of password patterns. I have developed this application single handedly written in low level language to process terabytes of data.

- with multithreading 1 billion comparison per seconds.
- cross-platform(windows, linux and macOS) desktop app.
- built asynchronous disk storage system for pattern database.
- core engine written completely in c++ for performance.
- headed UI/UX design and implemented responsive frontend written purely in html, javascript and css without a single use of libraries to optimise performance in non-native desktop app.

Freelance & Projects

● **Patternscape**

June 2019 - September 2020

Patternscape: an open source project to generate database of patterns in password. It works by processing publicly available data breaches and processing huge amount to data to generate patterns. Anyone can use those patterns to analyzes vulnerable password or any other security application.

- completely open-source and freely available to use under MIT license.
- written 200 pages documentation focused on security developers.
- cross platform app: Windows, macOS and Linux
- node.js interface attached with c++ engine without any bridge.
- multi-threading and concurrency can achieve 1 Billion TPS.

Open-source Code  Project Wiki  Project Overview 

● **Mutesync**

November 2019 - Present

Hardware button to interact with virtual meetings like google meet, zoom, team etc.

We crowdsourced on kickstarter and indiegogo to successfully raise \$65K and kickstart manufacturing. I am responsible for complete windows side of software and partially handling macOS side as well.

- communicate with operating system UI tree to traverse other apps functions.
- low level code in C++ to fast tree traversal and event based system to communicate status to app.
- learned and implemented win32 and macOS UIAutomation framework.
- realtime error monitoring system using sentry, slack and segment.
- automated CI/CD using github action and CircleCI.

Education

● **Computer Science in Game Developement, JNAFAU India**

2016 - 2020

● **High School, Kendriya Vidyalaya**

2014 - 2015