Summary

Experienced Software Engineer with 6+ years of expertise in building scalable, high-performance applications, optimizing APIs, and integrating machine learning models. Known for leading cross-functional teams in fast-paced environments, delivering data-driven solutions, and improving system performance. Adept in backend technologies, cloud platforms, and agile practices, with a focus on enhancing user experience and business outcomes.

Skills

Backend:

Python, Node.js, TypeScript, JavaScript, Go, Gin, gRPC, Protobuf, MySQL, PostgreSQL, MongoDB, ElasticSearch, Redis, Docker, Git, Jest, Mocha, Chai, Jenkins, AWS (S3, DynamoDB, CloudWatch, EC2, Lambda, Route53, ELB, SQS)

Frontend:

React.js, Redux, HTML, CSS, Styled-Components, Material UI, Tailwind CSS

DevOps & Cloud:

Docker, Jenkins, AWS (S3, EC2, Lambda), Kubernetes

Soft Skills:

Leadership, Problem-Solving, Team Collaboration, Communication, Agile Methodologies

Experience

Software Engineer

Decentral | (2023 – Present)

- Spearheading backend development, architecting RESTful and WebSocket-based microservices with a focus on scalability and performance.
- Designed and implemented Nginx load balancing, optimizing traffic flow and ensuring secure, efficient service interactions.
- Developed a **Golang-based service** to synchronize blockchain data into a local PostgreSQL database, reducing query times by 30%.
- Implemented **pub/sub workflows using Redis**, enabling asynchronous task execution, improving processing speed by 20%.

- Created a **search engine** with **R2R (RAG to Riches)** to streamline internal document discovery, reducing search time by 50%.
- Fine-tuned **open-source models from Hugging Face**, improving domain-specific accuracy by 35%.
- Integrated **multiple LLMs (OpenAl, Anthropic)** into a custom **WhatsApp bot**, enabling group and personal chats without official API limitations.
- Built UI projects with Angular and deployed applications using Vercel V0, ensuring seamless front-end delivery.
- Managed cryptocurrency data ingestion pipelines, leveraging multithreading and GPT-4/Gemini to summarize large datasets efficiently.
- Set up **CI/CD pipelines** on AWS ECR and **GitHub Actions**, automating deployments and increasing release frequency by 25%.
- Established **Docker** and **Docker Compose** for project environments, streamlining deployments on in-house servers and AWS services.

Team Lead and Software Engineer

Enertics Inc., Toronto, CA | (Jan 2023 - Apr 2023)

- Led the implementation of the **Inventory Management System**, resulting in a 30% increase in operational efficiency.
- Managed the system architecture for both backend (**Node.js/TypeScript**) and frontend (**Angular 15**), ensuring seamless integration and a mobile-first approach.
- Applied **repository**, **proxy**, and **transformer design patterns**, improving code modularity and readability.
- Wrote comprehensive **unit tests** using **Jest** and **Supertest**, ensuring robust code coverage and reducing post-deployment bugs by 15%.

Senior Software Engineer

Freightify, Chennai, India | (Jul 2019 - Aug 2022)

- Developed high-performance **microservices** using **Golang**, enabling the scaling of an API product that handled 100,000+ requests per day.
- Reduced API response time by **40%** by refactoring legacy **PHP** code into **Golang microservices**, optimizing resources and enhancing performance.
- Designed and implemented **Node.js** microservices following **Test-Driven Development** (**TDD**), improving code quality and reducing defects by 25%.
- Employed **CQRS** to streamline rate sheet upload and data transformation processes, reducing processing time by 30%.
- Integrated Zoho CRM for automated invoicing, reducing operational time from 1 day to a few seconds.
- Developed React.js/Redux applications for customer domain configurations, improving user efficiency by 20%.
- Led weekly **knowledge-sharing** sessions and organized a **Documentation Hackathon**, fostering collaboration and improving cross-team communication.

Associate Developer

Jio, **Mumbai**, **India** | (Jun 2017 - Jun 2019)

- Successfully migrated **Jio Music** (now **JioSaavn**) from **PHP** to **Node.js**, boosting performance for a 100M+ user base.
- Collaborated with **Google** to integrate **Google Home** compatibility, enhancing product accessibility for 10M+ users.
- Designed scalable architecture for **Jio Tayari** (ed-tech platform) with **Socket.io** for real-time chat and **ElasticSearch** for fast, accurate search.
- Contributed to **Jio Gate** (society management app) and **JioTube** (blockchain-based proof-of-concept), demonstrating innovation in app development.
- Led the design and implementation of a custom **CI/CD portal** using **Node.js**, streamlining continuous integration and delivery processes across teams.

Personal Projects

CardioBox

A gamified fitness app that tracks workouts, fitness levels, and provides new training regimens daily. <u>Demo on sumitbopche.com</u>

Automated Irrigation System

A time-based irrigation system using **Arduino** for field irrigation. <u>Demo on sumitbopche.com</u>

CoWIN Vaccine Alert System

A notification system that alerts users when vaccine slots are available for booking.

Education

Humber College

Postgraduate Degree, Enterprise Software Development (2022 – 2023)

University of Mumbai

Bachelor's Degree, Information Technology (2013 – 2017)

Honors & Awards

- **Best Capstone Project Award**, Humber College (Apr 2023)
- **1st Runner-up, Hackathon**, Humber Tech Society (Mar 2023)
- 2nd Rank, Techknow CSI RAIT, (Oct 2016)
- AIR 401, TCS Codevita, Tata Consultancy Services (Apr 2017)
- Best Solution Award, Hackathon, CSI RAIT (Mar 2017)