

Prajwal Murthy

prajwal.svmurthy@gmail.com | <https://prajwal.me> | <https://linkedin.com/in/prajwal-svm> | <https://github.com/prajwal-svm>

WORK EXPERIENCE

Fullstack Engineer (Co-op)

Supplyframe

Jun 2024 – Dec 2024

Pasadena, California

- Led security enhancement initiatives using Burp Suite tools and custom scripts to identify and resolve critical XSS vulnerabilities across high-traffic applications, reducing security breaches by over 40%
- Architected and executed migration of Socket.io infrastructure with 8 Express-compatible plugins, implementing connection pooling and event buffering to achieve 25% performance improvement
- Designed and developed components for internal design systems using React, TypeScript, and Storybook, creating 30+ reusable components that decreased design inconsistency by 30%
- Implemented real-time collaborative messaging features using WebSocket and Redis pub/sub, optimizing connection handling and state synchronization to support 1000+ concurrent users with <100ms latency

Frontend Engineer (Mid Level)

Certa.ai

Mar 2022 – Nov 2022

Remote

- Architected and developed enterprise-scale third-party risk management platform serving 50,000+ users, utilizing React, TypeScript, and Redux Toolkit with custom middleware
- Built high-performance UI component library of 40+ components using React, Styled Components, and Jest, achieving 95% test coverage
- Engineered dynamic dashboards using React Flow and D3.js, implementing virtual scrolling and lazy loading to handle 10,000+ nodes while maintaining 60fps

Software Engineer

Snapwiz Inc

Aug 2019 – Mar 2022

Remote

- Optimized Edulastic platform serving 30M+ users by implementing React.Suspense, code splitting, and lazy loading, resulting in 40% smaller bundle size
- Designed MongoDB schema optimization and indexing strategies, reducing average query time from 500ms to 100ms
- Developed reusable React hooks and context providers, reducing codebase complexity by 35% and improving development velocity by 40%

EDUCATION

Master of Computer Science

Illinois Institute of Technology

Jan 2023 – Dec 2024

Chicago, IL

PERSONAL PROJECTS

Intelligent Content Assistant / OpenAI GPT-4-turbo, LangChain, React, Node.js, Redis, AWS

- Engineered a production-grade AI content platform using LangChain for orchestrating multiple LLMs, implementing intelligent caching and prompt optimization that reduced API costs by 40%

Social Media App for Startup Founders / React, Node.js, GraphQL, PostgreSQL, Firebase, Google Cloud

- Engineered a production ready social media platform utilizing React and GraphQL with Node.js, implementing a scalable serverless architecture

SKILLS

Programming Languages: TypeScript, JavaScript (ES6+), Python, Java, C++, C

Front End Engineering: React, Next.js, HTML, CSS (SASS/SCSS), React Native, Tailwind CSS

Backend Engineering: PostgreSQL, Nginx, Redis, Firebase, MongoDB, Flask, Express.js, REST APIs, GraphQL, Websockets

Deployment & CI/CD: Git, Docker, Kubernetes, Jenkins, Amazon Web Services, Google Cloud, Azure Cloud

Build & Testing: Node.js, Webpack, Babel, Jest, Cypress, React Testing Library

AI Engineering: OpenAI Embeddings, LangChain, Prompt Engineering, Vector Databases (EdgeDB), RAG, Pytorch