





Samarth Kulkarni *Software Engineer*

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EDUCATION

B.Tech in Computer Science Engineering, Walchand Institute of Technology
CGPA: 9.71

2020 – 2024

SKILLS

Languages — JavaScript, Ruby, Python. • **Frontend** — React.js, Next.js, Ant Design, Shad CN, Tailwind CSS, RTK Query, TanStack Query, GraphQL, ES6. • **Backend** — Ruby on Rails, Flask, RESTful APIs, Sidekiq, Redis, JWT, RSpec. • **Database** — SQL, PostgreSQL. • **Machine Learning** — Python, NumPy, Pandas, Scikit-learn, Regression Models. • **DevOps** — Git, Linux (Ubuntu), VSCode. • **Tools** — Postman, Supabase, AWS App Runner, EC2, Secrets Manager.

PROFESSIONAL EXPERIENCE

Software Engineer, Josh Software

Jul 2024 – Present | Pune, India

- Designed a charitable marketplace using NextJS, Tailwind CSS, Supabase SDK, and GraphQL Apollo Client
- Built a dynamic category-driven multi-step form with state persistence, dynamic validation using Zod, and interactive progress tracking Stepper in NextJS
- Integrated GraphQL hooks to optimize data fetching, eliminating under/over-fetching and improving API efficiency by 35%.
- Engineered passwordless login via SMS OTP and email authentication, reducing user onboarding time by 35%.
- Built protected routes in NextJS to enforce authentication via token verification.
- Designed a responsive UI with Tailwind CSS, ensuring cross-device compatibility (mobile, desktop).
- Collaborated on stages of systems development lifecycle from requirement gathering to production releases.
- Optimized and updated the admin dashboard by migrating from React.js to Next.js, increasing usability with intuitive dashboards by reducing admin click rate by 20%.
- Delivered full-stack features for an enterprise ERP system using Ruby on Rails and React.
- Introduced 2-factor authentication (2FA) and optimized login flows with RTK Query.
- Orchestrated secure RESTful APIs for user verification and password management in ReactJS.
- Created React/Ant Design dynamic forms, reducing user input errors by 80% through form validation logic.
- Update RESTful APIs with Sidekiq for background job processing, improving system efficiency by 60%.
- Integrated bulk data upload and report generation features for multiple modules.

Software Engineering Intern, Josh Software

Jan 2024 – Jun 2024 | Pune, India

- Constructed an API-only application with JWT authentication and RBAC.
- Achieved 96.2% test coverage with RSpec, ensuring high code quality and reliability.
- Reduced database query response time by 30% implemented pagination and caching, reducing response time by 60%.
- Built a React-based auction platform with TanStack React Query and React Router.
- Integrated backend logic into a client ERP system using onion architecture.
- Developed a role-based bus booking platform with JWT authentication, pagination, and PDF generation using Ruby on Rails.

Data Science Intern, Celebal Technologies

Jun 2023 – Aug 2023 | Remote

- Leveraged DALLE and prompt engineering to process satellite vegetation data, contributing to a 22% improvement in object detection accuracy.
- Devised machine learning algorithms for data prediction, achieving an MAE less than 1.
- Completed end-to-end machine learning projects, improving model efficiency.

PROJECTS

Advanced House Price Prediction 

Tech Stack: Python, Flask, NumPy, Pandas, Joblib

- Developed a Flask-based REST API for house price predictions with trained regression models.
- Implemented data preprocessing pipelines with Pandas for feature encoding and transformation.
- Improved input handling to reduce prediction errors by 20%.
- Leveraged Joblib for efficient model serialization and deserialization.
- Applied logarithmic transformation and reversal techniques for precise prediction accuracy.

Organisations

LOL Coding Club

Coordinated a Power BI workshop and assisted **100+ students** by resolving technical and conceptual queries.

Josh Software, Software Engineer 

Delivered a **hands-on session** on **Git fundamentals**, mentored students by teaching them Rails migrations, MVC architecture, and database design to 80+ students during a Ruby on Rails bootcamp at Fergusson College, Pune.