

# Alok Pal

## Software Engineer

📞 +91-8605655487 | ✉ alokpal28071997@gmail.com | 🐙 github.com/Alok-Pal | 🔗 linkedin.com/Alok-pal | 📁 Portfolio

## Summary

Fullstack developer with over 3.5 years of experience in architecting and developing scalable web applications using modern technologies. Specialized in Javascript, React, Node, Next, Aws, React Native and Python with expertise in microservices, RESTful APIs, cloud architecture, CI/CD, and database optimization. Proven track record in leading engineering teams, mentoring developers, and driving Agile best practices. Passionate about building performant, secure, and maintainable software solutions in fast-paced, collaborative environments.

## Skills

**Programming:** JavaScript, TypeScript, ReactJs, Redux, NodeJS, React Native, REST API, GraphQL, gRPC, ExpressJs, MongoDB, PostgreSQL, MySQL, PrismaORM, Python, Java.

**Cloud/DevOps:** AWS, GCP, Docker, CI/CD Pipelines, Firebase, Redis, WebSockets.

**Testing:** Jest, Integration Testing, Automation Testing.

**Miscellaneous:** Git, Scrum, Agile Development, GitHub, Regex, OOPS, Data Structures/Algorithms, SCSS, Tailwind, Ant, MUI, Bootstrap, Performance Optimization, Technical Hiring.

## Work Experience

### Serviots (Ahmedabad)

Software Engineer

June 2024 - Present

- Led the end-to-end development of a cross-platform mobile application designed to support patients in adhering to prescribed medical treatments using **React native**, and **Node js**.
- Collaborated with the backend team to **optimize the notification system almost 60%** by replacing Redis and BullMQ with AWS Lambda and Step functions within a VPC and NAT Gateway setup, ensuring more reliable and timely delivery of notifications.
- Implemented GCP **Firebase token-based notification system** to send timely and targeted notifications to users, handling dual-token logic to differentiate between staging and live app environments/users.
- Improved website performance in a Next.js by optimizing rendering strategies and asset loading **resulting in a 35% faster** load time and also boosting the **Lighthouse performance score from 72 to 95**.
- Integrated **Lenis and Framer Motion** to deliver buttery-smooth scrolling and UI animations, significantly improving the First Input Delay (FID) and Cumulative Layout Shift (CLS) scores.
- Integrated **WebSockets** to enable real-time client-server communication, replacing legacy polling-based architecture and reducing network overhead & server costs.
- Currently developing and designing the multi tennat system for client in the pharmasy domain where the **hipa and fhir** rules are there.
- Collaborated with a team to develop a **health support AI assistant**, enhancing user engagement through intelligent and personalized assistance.

### Satva-Solution (Ahmedabad)

Associate Software Engineer

Jan 2023 - June 2024

- Worked with microservices in the fintech domain to integrate and manage financial data from platforms like **Xero, Zohobooks and QuickBooks**, enabling seamless data synchronization and improved scalability..
- Contributed to the development of secure RESTful APIs, implementing **role-based access control (RBAC)** and token-based authentication (**JWT/OAuth2**) to ensure robust authorization and data privacy.
- Integrated third-party payment gateways for the clients like **Stripe, Razorpay and PhonePe** to support secure and scalable transaction workflows within the application.
- Contributed to the team for development of real-time communication features using **WebRTC and TCP sockets**, delivering low-latency, high-reliability functionality for client applications.

### Limitless Web Wizards (Indore)

Full Stack Developer

March 2018 - December 2022

- Built and maintained scalable web applications with the team using **React.js** for the frontend and **RESTful Web APIs** on the backend, ensuring high performance and seamless user experiences.
- Implemented an **SMTP-based** email service to handle client-side email delivery with support for customizable email templates.
- Enhanced React application performance by **caching, lazy component loading, and code splitting** with React's dynamic import() and React.lazy.

## Projects

### WebRTC & Chatting App (React Native Expo)

- Developed real-time video calling functionality using **WebRTC for peer-to-peer** media streaming and **Socket.IO** for signaling and connection management.
- Signalling and session management were done using the Express backend and **Node.js**. **TURN/STUN** servers were put into place to ensure reliable connections under different network conditions.

### OCR Document Processing System (Python, .NET API)

- Leveraged **Python's Tesseract OCR** to extract structured data from base64-encoded images with high accuracy.
- Built RESTful API using **Node js**. to expose the OCR results.
- Integrated Regex parsing for validation and normalization of extracted fields.

## Education

### MIT Arts, Design and Technology, Pune

Bachelor of Technology - BTech, Marine Engineering - 70%