

SAJAN ACHARYA

Senior Software Engineer

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PROFESSIONAL SUMMARY

Results-driven Senior Software Engineer with 5+ years of experience designing, developing, and deploying scalable web applications. Expert in Node.js, React.js, and Nest.js with deep expertise in microservices architecture, REST API and GraphQL development, and both SQL (MySQL, PostgreSQL) and NoSQL (MongoDB) databases. Proven track record building high-traffic SaaS platforms, HRMS systems, ERP solutions, and AI-integrated products. Skilled in AWS cloud infrastructure, Docker containerization, Redis caching, Kafka messaging, and Elasticsearch. Strong team leader with experience mentoring engineers and driving Agile delivery.

TECHNICAL SKILLS

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

Frontend: React.js, Next.js, Vue.js, React Native, Redux (RTK Query), Tailwind CSS, HTML5, CSS3

Backend: Node.js, Express.js, NestJS, REST API, GraphQL

Databases: MongoDB, MySQL, PostgreSQL, Redis, Elasticsearch

Messaging & Streaming: Apache Kafka, WebSocket

Cloud & DevOps: AWS (EC2, S3, RDS), Docker, Git, CI/CD

ORM / Query Builders: Prisma, Mongoose

Testing: Jest, Mocha, Chai, Supertest, TDD, Unit Testing, Integration Testing

Methodologies: Agile, Scrum, Kanban, Microservices Architecture, SaaS, Multi-Tenancy

Integrations: Xero Accounting, Stripe Payments, Gen AI / LLM APIs

PROFESSIONAL EXPERIENCE

Senior Software Engineer | **Dome Infosys** | *Sep 2024 – Present*

- Lead full-stack development of scalable SaaS and microservices-based applications using the MERN stack (MongoDB, Express.js, React.js, Node.js).
- Architect and design high-availability backend systems serving thousands of concurrent users with optimized API response times.
- Lead cross-functional teams across frontend, backend, and AI engineering to deliver end-to-end product features on schedule.
- Conduct weekly technical learning sessions and mentor junior engineers on best practices in Node.js, React.js, and system design.
- Drive code quality standards through structured code reviews, documentation, and enforcement of TDD practices.

Software Engineer | **Cloud Tech Service** | *Jan 2024 – Sep 2024*

- Developed and maintained full-stack web applications using Node.js, Express.js, and React.js with MySQL and MongoDB databases.
- Designed and implemented RESTful APIs and microservices for distributed, high-availability systems.
- Built and optimized complex database schemas improving query performance and data integrity across relational and NoSQL databases.
- Collaborated with cross-functional Agile teams in sprint planning, daily standups, and retrospectives to ensure timely delivery.

Software Engineer | **Kitwosd IT Support Center** | *Jan 2023 – Jan 2024*

- Designed and developed full-stack applications using the MERN stack (MongoDB, Express.js, React.js, Node.js).
- Implemented real-time features including live notifications and collaborative tools using WebSocket technology.
- Created efficient, normalized database schemas for both relational (MySQL) and NoSQL (MongoDB) databases.
- Built and consumed RESTful APIs supporting mobile and web client applications.

Associate Software Engineer | **Kitwosd IT Support Center** | *Aug 2021 – Dec 2022*

- Developed responsive web applications using React.js, Node.js, and MongoDB following MVC architecture.
- Contributed to database design, optimization, and REST API development across multiple client projects.
- Collaborated with senior engineers through pair programming and code reviews to improve technical skills and code quality.

KEY PROJECTS

Jobscater.com – Job Portal Platform — *Node.js, Express.js, React.js, MongoDB, Redis, Kafka, Elasticsearch, Microservices, Gen AI*

- Architected and built a scalable backend using microservices architecture to support high-volume job posting, application management, and user workflows.
- Implemented real-time chat and email notification services using Apache Kafka message queues, reducing notification latency by decoupling services.
- Designed and integrated Elasticsearch-powered full-text search enabling fast, relevance-ranked job discovery across millions of listings.
- Integrated Generative AI APIs for intelligent applicant screening and personalized job recommendation engine, improving match quality.
- Built centralized logging and monitoring services providing real-time observability across all microservices.
- Developed scalable, paginated REST APIs for job postings, applications, employer management, and candidate profiles.

Jobscater – Multi-Tenant HRMS — *React.js, Next.js, Node.js, Express.js, MongoDB, Redis, WebSocket, RTK Query, Tailwind CSS*

- Built a fully multi-tenant HRMS SaaS platform supporting employee management, attendance tracking, payroll processing, and leave workflows for multiple organizations from a single deployment.
- Implemented strict tenant-based data isolation in MongoDB ensuring zero data leakage across organizations.
- Developed real-time attendance updates and push notifications using WebSocket, giving HR managers live visibility into workforce status.
- Engineered a role-based access control (RBAC) system allowing granular permission management across admin, manager, and employee roles.
- Built responsive, data-rich dashboards and HR module interfaces using React.js, RTK Query for server state management, and Tailwind CSS.
- Implemented overtime tracking and payroll calculation engine with configurable rules per organization.

DAT – Enterprise ERP System — *NestJS, Prisma, PostgreSQL, Redis, GraphQL, AWS, Xero*

- Designed and built a full-featured ERP backend covering inventory management, sales orders, customer management, and financial reporting using NestJS and Prisma ORM.
- Implemented GraphQL API layer for flexible, efficient querying of inventory and stock data, reducing over-fetching for complex dashboard views.
- Integrated Redis caching layer for frequently accessed catalog and inventory data, cutting average API response time significantly.
- Connected Xero accounting API to automate invoicing, payment reconciliation, and financial reporting workflows.

- Deployed application on AWS (EC2, RDS, S3) with auto-scaling configuration ensuring high availability and fault tolerance.

File Management System – Insurance Documents — *Node.js, Express.js, React.js, MongoDB, Kafka, WebSocket*

- Built a secure document management platform for insurance files, datasets, and compliance documents with version control and audit logging.
- Designed an optimized MongoDB schema supporting fast document retrieval, metadata filtering, and bulk operations across large file collections.
- Implemented Kafka-based event-driven pipelines for asynchronous file processing, virus scanning integration, and downstream system notifications.
- Developed real-time progress notifications using WebSocket, keeping users informed during long-running file upload and processing operations.
- Created a responsive React.js frontend with drag-and-drop file upload, document preview, and advanced filtering capabilities.

Pokhara Motors – E-Commerce Platform — *Node.js, Express.js, PostgreSQL, React.js, AWS*

- Developed a full-stack e-commerce platform with product catalog management, country-specific pricing engine, and order management system.
- Built POS (Point-of-Sale) system backend supporting in-store transactions, inventory sync, and receipt generation.
- Implemented an admin dashboard using React.js for inventory control, pricing rule management, and business analytics reporting.
- Integrated secure payment gateway with order tracking, confirmation emails, and refund workflows.
- Deployed backend infrastructure on AWS with PostgreSQL on RDS, achieving high availability for business-critical operations.

EDUCATION

Bachelor of Science in Computer Science and Information Technology (BSc. CSIT)

Academia International College | 2019 – 2024

Higher Secondary Education (+2 Science)

Caspian Valley College | 2017 – 2019

ADDITIONAL QUALIFICATIONS

- **Agile & Scrum:** Experienced practitioner of Scrum and Kanban workflows in fast-paced product teams.
- **Problem Solving:** Strong analytical and systematic debugging skills with a structured root-cause analysis approach.
- **Leadership & Mentoring:** Proven experience leading technical teams, conducting learning sessions, and upskilling junior engineers.
- **Global Collaboration:** Experienced working across distributed, cross-timezone teams on international software products.
- **Code Quality:** Committed to clean code principles, thorough code reviews, comprehensive documentation, and TDD standards.
- **Continuous Learning:** Actively follows industry developments in cloud-native architecture, AI integrations, and modern frontend frameworks.