

Sourav Karki

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Skills

- **Languages & Frameworks:** TypeScript, JavaScript, Node.js, Express, Python, Django, NoSQL, SQL, NestJS
- **Backend & Architecture:** NestJS, Clean Architecture, OOP, Microservices, RabbitMQ, Design Patterns
- **DevOps & Tools:** AWS, Docker, Cloud Computing, CI/CD, Nginx, Linux, Git :- Backend Development, MERN Stack Developer

Experience

Role	Company	Period
Mid Backend Engineer	<u>LeanQ Digital</u>	08/2023 - Current
Software Engineer, Intern	<u>CenTech Nepal</u>	08/2021 - 07/2022

• Followed the backend development of an enterprise-level event management platform using **NestJS, PostgreSQL**, and **Next.js**, implementing

- **Clean Architecture** within a **monolithic structure**, with features like real-time data processing, role-based access control, and optimized SQL queries, while coordinating deployment with **Docker** and **CI/CD pipelines** on **AWS**.
- Scaled real-time **WebSocket** communication across multiple nodes by integrating **Redis Pub/Sub**, ensuring consistent event propagation
- Improved API response times by up to 40% by implementing a Redis-backed **caching mechanism**, significantly reducing database hits and enhancing system performance.
- Redesigned search functionality by developing a dedicated microservice with Elasticsearch integration, improving query accuracy and reducing search latency in large datasets using **NestJS, NodeJS, MongoDB, NATS** and **AWS**.
- Designed a scalable multi-tenant **SaaS** solution incorporating subdomain routing and a unified **NestJS** codebase, enhancing system maintainability and reducing code duplication by 25%
- Collaborated with international clients to gather requirements and led the development of apps that aligned with their business objectives and technical expectations.

• Developed and maintained multiple medium-scale full-stack applications using the MERN stack (**MongoDB, Express, React, Node.js**), ensuring responsive UI and scalable backend services.

- Implemented MVC architecture in **Node.js** with **Express** and templating engines like **EJS** and **Pug**, collaborating with cross-functional teams to design, develop, and optimize application features.
- Enhanced an existing **CRM** application by adding new features, debugging issues, and optimizing code for improved performance and user experience build on **NodeJS** and hosted in **AWS**.

Projects

- **Support Coordinator (SaaS):** A multitenant **SaaS** NDIS platform developed using **NestJS, Next.js** and **PostgreSQL**. Each tenant gets their own subdomain, and the system is hosted on Hetzner with **Docker** and **Nginx** using wildcard domains.
- **Create Engage:** A dynamic event management platform that allows users to authenticate and participate in live events based on configurable event settings. It lets users join live events with event-based authentication, public chat, and tech support. Built using **NestJS, Node.js, PostgreSQL, Redis, Socket.io** and **Docker**.

- **FilterMax:** Built an ecommerce for specific niche (mechanical parts for vehicles) and real time WebSocket API, replicating exchange behavior using **NestJS, Postgres Sql, Docker**, in cleanarchitecture. Integration to delivery service and Sync database
- **Consultancy CRM:** A centralized CRM platform for education consultancies to manage students, classes, overseas study processes. It includes role-based access control and multi-branch support. Built in **Node.js, Pug** and **MongoDB**

Education

Bachelor of Computer Science

Infrastructure University Kuala Lumpur

03/2022 - 03/2025

Mentorship

- Technical Mentorship: Groomed interns for backend development, provided guidance on coding patterns, workflows and agile
- methodologies to increase their skill and collaborate with the development team effectively. Additionally, divided tasks between development team members.
- Focus in Software Development and Systems Engineering

Others

- **Language:** Nepali (Native), English (Proficient), Hindi (Basic)
- **References:** **Pramod Hamal, 9869853345, pramodhamal.r@gmail.com**