Nischal Dahal

Full Stack Engineer | GitHub | Portfolio +977 9812745309 | <u>info@nischal-dahal.com.np</u> Open to Relocation | Kathmandu, Nepal

Summary

Self driven Full Stack Engineer with +4 Years of experience and a System Architect, well qualified developer with focus on scalable, secured, organised apis & serverless architecture, having wide range of knowledge on different domains, covering web development, Android, iOS & Cross platform development, and optimistic about learning new tools and technology with adaptive/growing mindset.

Experiences

AITC International | 02/2022 - Present [Full Stack Engineer]

- Ensured secured permission handling using CASL, ABAC, with multi tenant based permission handled.
- Integrated third party apis to enhance functionality, sentry for monitoring, ensuring high uptime.
- Migrated from NextJS to Remix, while enhancing the user experience, and making less server load also having user scaled and increase traffic by 15% more in volume.

- Implemented animation libraries, and ui libraries like shaden, frappe ui, framer motion, swapy js for clean and minimal delightful, user interaction and micro interactions.
- Leading and creating cross platform flutter application for visitor management, including residential app and guard app, implementing on clean architecture, bloc state management, auto router, web sockets, http polling, real time notifications, and so on
- Used Terraform for managing infra, and GCP for Kubernetes cluster with automatic provisioning, while using secret manager, and container registry.
- Managed mobile app releases, and handled the device built in permission handling, while incorporating CI/CD deployment with auto releases and for Play Console and App Store.
- Team lead on multiple projects, both on monolithic and microservices, using kafka as a distributed messaging queue.

AITC International | 01/2022 - 02/2022 [Full Stack Engineer Intern]

- Learned to setup PostgresDB data replication and ensure high availability of pg instances.
- Implemented the search functionality like Elastic Search using Lucene Standard Algorithm, and

- edgegram method, creating recommendation and autocomplete system.
- Developed backend in microservices architecture, integrated rabbitmq for cross api services communication and BBF to build scalable and robust system.
- Implemented advanced vector similarity search using pgvector, enabling efficient point-in-time recovery with optimised precision, distance calculation, improving search performance and data retrieval accuracy.

VRIT Technologies | 09/2021 - 02/2022 [Graphic Designer & Social Media Handler]

- Designed visually appealing graphics, content for marketing and social media campaigns.
- Edited high-quality video content for promotional use, utilized tools like Adobe Photoshop, Illustrator, Premier Pro and After Effects composition.

Freelancing - Upwork | 04/2021 - 09/2021 [Web Developer]

 Created a AIR Quality index, website for Nepal implementing district hover filtration, api for zonal data of Nepal, delivering client a easy responsive full fledged platform.

Projects

- Building a Chorus extractor, best song part extractor, using the machine learning and audio spectrum data in python.
 [Link]
- Created Figma Plugin, which generated and exports code for tailwind configuration for project init, arb/intl language, exporting assets and color codes making easier transition for design to development. [Link]
- Published a flutter library for Toast. [Link]
- Created and Maintained a OSS project called 'prisma-fns' for better extensibility for prisma orm. [Link]
- Built MyResume, a resume dynamic builder with tools like React Router framework, Drizzle, and used <u>fly.io</u> for deployment via docker.
- Maintaining personal portfolio, publishing blogs, updating content, and RSS Feed. [Link]
- Created a Chrome Extension that lets, you search term or phrase on AI tools, and multiple search engines.
- Build a temp mail, mail forwarder, SMTP with Go, and using Prima, Hono, Remix. [Link]
- Chrome extension which redirect you to actual URL with the short code.
- Published a npm library for `prisma-type-generator`. [Link]

Skills

Devops, Backend Development, Infra Management, Architecture and Database Design, App Development, Open source contributor, Frontend Developer, AI Engineer, Agent Vibe Coding, Team Lead, AI & Agent development

Education

Swastik College, Nepal **Bachelor** in Computer Science and Information Technology Jul 2024 - Dec 2027 (Expected)

Premier Secondary School High School (Major Science) Feb 2020 - Mar 2022

Languages

Nepali (Native), English (Professional Working | B)

Certificates

- API Design and system design on Coursersa.
- AWS Certified Cloud Practitioner.
- Data structure and Algorithm Frontend Masters
- Duolingo English Proficiency test 135.
- Generative AI : Introduction to LLMs, Agent Programming LinkedIn Learning

Achievement

• Typescript type challenges.

Volunteer Experience

Youtube Content Creator | 2025 - Present, [Link] Publishing video on Tech Trends, Topics

References

Lee Robinson, Jack Harrington, Kent c. Dodds, Ant fu