

AAYUSH LAMICHHANE

Backend Developer / DevOps Engineer

Kathmandu, Nepal

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SUMMARY

Backend & DevOps engineer with 3+ years building and operating scalable, low-latency systems for remote-first products. Comfortable end to end across the stack — Python and TypeScript services, real-time WebSocket servers, Kubernetes, Terraform, and Grafana/Prometheus/Loki observability.

TECHNICAL SKILLS

- **Languages:** Python, TypeScript, JavaScript, Bash
- **Backend:** Node.js, FastAPI, Flask, REST APIs, WebSockets, Celery, Postgres
- **DevOps & Cloud:** Docker, Kubernetes, Terraform, NGINX, CI/CD, GitHub Actions, AWS
- **Observability:** Grafana, Prometheus, Loki
- **Databases:** SQL, NoSQL, Redis
- **Tools:** Git, Linux, Vim, Tmux, Godot
- **Frontend:** React

WORK EXPERIENCE

Bhoos Games

DevOps / Backend Developer

Remote

Jan 2024 – Present

- Built the backend for real-time multiplayer board games on WebSocket servers, load-tested and tuned to sustain sub 100ms p99 latency at 10k concurrent connections.
- Deployed and operate a Grafana, Prometheus, and Loki observability stack, across 3 game backends, implemented proactive alerting on p95/p99 query latency, enabling issue detection within minutes rather than user-reported incidents.
- Engineered core backend framework in TypeScript/Node.js to provide unified-API for games and servers that runs as either a remote server or a local in-process API via transparent proxying.
- Built an end-to-end-encrypted, local-first payroll accounting backend with sync semantics inspired by the Signal protocol.
- Automated server provisioning, deployments, and CI/CD pipelines, reducing release time from ~40 minutes to ~2 minutes.

Docsumo

Python Developer

Remote

Apr 2023 – Jan 2024

- Developed a disaster recovery automation script to streamline recovery procedures and improve operational resilience.
- Built an API performance monitoring tool to track endpoint performance and identify potential bottlenecks.
- Built Terraform-based infrastructure to provision ephemeral, isolated per-developer environments, eliminating shared-cluster conflicts and reducing testing iteration time by an estimated 40–50%.
- Deployed and operated micro-services on Kubernetes with Celery for distributed, asynchronous document processing.
- Redesigned the logging and tracing infrastructure to enable end-to-end request tracing across services and follow an action through its entire lifecycle.
- Investigated recurring production outages caused by Redis saturation and lack of failover, and implemented a Redis Sentinel-based architecture to improve high availability and prevent cache-related downtime.

PROJECTS

EaseAnnotate

Personal Project

Jan 2023 – Present

- Built and launched EaseAnnotate, a document-AI SaaS for annotating and extracting key information from unstructured documents; secured funding through Microsoft for Startups.
- Engineered the extraction pipeline with transformer-based models (LayoutLM)

Receipt Scanner

Personal Project

Jun 2022 – Dec 2022

- Built a key-information-extraction tool on a transformer-based LayoutLM architecture for custom field extraction from unstructured documents; containerized with Docker and automated build/deploy via GitHub Actions CI/CD.

EDUCATION

Pulchowk Campus, IOE, Tribhuvan University

Bachelor of Engineering in Computer Engineering

Lalitpur, Nepal

Nov 2018 – Apr 2023

- **Honors:** Ranked 7th of nearly 16,000 candidates in the national IOE entrance examination (2018)

CERTIFICATIONS

AWS Academy Cloud Foundations – AWS Academy

Nov 2025

GAJABAAR Infosecurity Mentorship Program – GAJABAAR

Nov 2025

PUBLICATIONS

Structured Information Extraction from Nepali Scanned Documents using Layout Transformer and LLMs.

Published on CHIPSAL, COLING 2025, Abu Dhabi, UAE

Jan 2025