ERICK KARKI

SOFTWARE ENGINEER

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SUMMARY

Full-stack software engineer with expertise in cloud infrastructure (AWS, GCP), troubleshooting, and building scalable systems. Strong problem-solving and communication skills, thriving in remote, customer-facing environments with a focus on empathetic support.

TECHNICAL SKILLS

- **Frontend** : JavaScript , React Js , Redux , TypeScript
- **Backend** : Node.js , Express.js , Java (Spring Boot) , Python
- **Cloud & DevOps:** AWS (EC2, S3, CloudWatch), GCP (Compute Engine, Cloud Storage), Docker
- **Database** : MySQL , Oracle , PostgreSQL , MongoDB , H2
- **Troubleshooting**: Log analysis, debugging (VS Code, IntelliJ), Postman

WORK EXPERIENCE

Software Engineering Intern
Speedhome | June-August 2025 | Remote (Malaysia)

- Migrated legacy Python Flask application to Java Spring Boot, modernizing backend architecture.
- Refactored existing codebase to follow Spring Boot best practices and MVC architecture.
- Collaborated with senior developers remotely to ensure seamless system integration
- Troubleshot and resolved integration issues during migration, submitting PRs for fixes and implementing CI/CD pipelines.

EDUCATION

Pokhara University **2020 - 2025**
Bachelor of Engineering - BE, Computer Engineering

Prasadi Academy **2018 - 2020**
10+2 , Science

Sainik Awasiya Mahavidyalaya **2011 - 2018**
Secondary Education Examination

PROJECTS

RetroRevive - *Online Thrift Store*

- **Description**: Designed and developed a full-stack application promoting sustainable fashion by enabling the buying and selling of pre-owned clothes.
- **Tech Stack**: ReactJS, Tailwind CSS (Frontend); Node.js, Express.js (Backend); MongoDB (Database); Postman (API Testing).

Key Features:

- User authentication and authorization for secure access.
- Product listing with advanced search and filtering functionality.
- Direct communication with sellers via WhatsApp or email.
- Facilitated cost-effective and eco-friendly reuse of clothes.

GitHub Link: RetroRevive Source Code

Automated Traffic Violation Monitoring Using YOLO Algorithm

- **Description***:* Built a system to automatically detect overspeeding, and vehicle number plates using deep learning and computer vision. Implemented real-time notifications for traffic personnel.
- **Tech Stack***:* Python, YOLOv8, DeepSORT, EasyOCR, OpenCV, FastAPI, PostgreSQL, React.js, .

Key Features :

- Real-time vehicle detection, tracking, speed estimation.
- Automatic number plate detection with OCR and violation logging.
- React-based centralized dashboard for traffic personnel.
- Scalable FastAPI backend integrated with PostgreSQL database.

GitHub Link*:* Automated Traffic Violation Monitoring Using YOLO Algorithm

URL Shortener API – *Java Backend REST Service*

- **Description:** Built a backend-only RESTful service that shortens long URLs and returns unique short codes, using Spring Boot. The project demonstrates a clean architecture with controller–service–repository layers, and includes proper database handling with JPA and H2.
- **Tech Stack: J**ava 24, Spring Boot, Spring Web, Spring Data JPA, H2 Database, Maven, Postman

Key Features:

- REST API for shortening and retrieving URLs via short code
- Clean, modular codebase following layered architecture
- Includes H2 database integration and Postman testing
- Packaged with Maven for easy local deployment

GitHub Link: URL Shortener API Source Code