Rohit Karna

Systems Analyst

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Objective

Software developer and tech enthusiast with expertise in JavaScript, Node.js, React, and Python, and a knack for bringing ideas to life through clean, scalable code. Proficient in working within Linux environments using shell scripting, Docker, and Git-based workflows. Seeking a challenging role that blends technical contribution with opportunities for growth, meaningful experiences, and continuous development.

Skills

Frontend/Backend Development, RESTful APIs, JavaScript, Express.js, Node.js, React, npm, Python, SQL, Docker, Git, Bash, Linux Systems Administration/Automation

Work Experience

Systems Analyst

Triad Asia Pvt. Ltd. | Kathmandu, Nepal   Sep 2023 - Present

- Utilize Linux-based environments with strong proficiency in shell scripting to automate routine tasks, manage system services, and support deployment workflows.
- Contribute to the development and maintenance of real-time software systems, ensuring stability, scalability, and high performance through continuous infrastructure improvements and feature-rich implementations.
- Design, build, and maintain full-stack web applications using JavaScript, Node.js, Express, React, Docker, and MSSQL, with a focus on clean architecture and modular design.
- Implement and manage version control workflows using Git.
- Experienced with Python and its frameworks like Django, FastAPI, Numpy, Pandas, Selenium, etc.
- Support real-time operations in oil terminals across the US and Europe. Work in collaboration with electrical engineers with exposure to PLC and SCADA systems.

IT Officer

LalNepal Pvt. Ltd. | Kathmandu, Nepal   Nov 2022 - Aug 2023

- Provide IT assistance to staff and customers.
- Keep track of technological advancements and trends in e-commerce.
- Quality Assurance.

Education

BSc. in CSIT

Texas International College, Kathmandu, Nepal

Intermediate

Lahan Merry Children Secondary School, Lahan, Nepal

SLC

Deneb Academy, Kathmandu, Nepal

Certifications and Training

Crash Course on Python, Using Python to Interact with the Operating System, Introduction to Git and Github, Supervised Machine Learning: Regression and Classification, Advanced Learning Algorithms

Project Experience

1. Railman - Real-Time Railcar Tracking System

Tech Stack: Node.js, Express, React, Docker, MySQL, PDF-lib, Shell Script, Linux

Description: A real-time system for tracking railcars, updating their staging data, and generating formatted switch lists as PDFs. RailMan is a web application based on Express.js and MSSQL on the backend and React on the frontend. Interacts with an already existing system called TMS (Terminal Management System) to ease the process of railcar fuel loading in the US Oil Terminals.

Role: Designed and implemented backend APIs, PDF generation logic, and real-time update functions. Also configured cron jobs and shell scripts on Linux to automate tasks.

2. Triad EMS

Tech Stack: Express.js, React, Node.js, MSSQL

Description: Internal web application developed for Triad Asia to streamline employee management processes. Features include user management, leave application workflows, leave balance tracking (paid and sick leaves), and approval/denial mechanisms.

Role: Designed and developed frontend and backend components, implemented RESTful APIs, managed state with React, and ensured smooth user experience across modules.

3. Farm Easy

Tech Stack: Python, TensorFlow, CNN, FastAPI, React Native, React

Description: A user-friendly mobile app designed for farmers to capture images of paddy leaves and predict the likelihood of one of the nine disease infection using deep learning. The app leverages a multi-class CNN model trained on a dataset of over 10,000 labeled paddy leaf images sourced from Kaggle.

Role: Developed and fine-tuned the CNN model. Developed the web front-end using React and integrated the TensorFlow model for on-device mobile image classification. Designed the workflow for image capture, preprocessing, and real-time prediction.

4. dirwatch

Tech Stack: Bash, Linux, Cron, Email Automation

Description: A Bash script that continuously monitors a specified directory and automatically emails any newly created PDF files. Developed to automate billing workflows at terminals by promptly sending load bills without manual intervention.

Role: Designed and implemented the script to watch directory events, trigger email notifications with attachments, and ensure reliable operation via cron scheduling.

Languages

English, Nepali

portfolio-69e43.web.app/   github.com/rhoitkarna