

Pukar Rimal

+977 9866337295 / pukarrimal11@gmail.com / [Linkedin/PukarRimal](#) / [Github/PukarRimal](#) / [Portfolio](#) / Balaju, Kathmandu, Nepal

SUMMARY

Computer Science undergraduate specializing in Artificial Intelligence, Machine Learning, and Data Science, with hands-on experience in developing LLM-powered systems, web crawling, machine learning models, recommendation systems, speech-to-text solutions, and OCR applications. Passionate about building AI-driven, data-centric solutions while continuously enhancing practical research and engineering expertise.

EXPERIENCE

Junior AI Engineer MarginTop Solutions PVT.LTD

Jan 2026 – Present
Phulchowk, KTM

- Developed AI-driven recommendation systems to deliver personalized content suggestions.
- Built and deployed OCR applications for automated text extraction from images and documents.
- Designed live web crawling pipelines for dynamic quiz generation, handling pagination and workflow automation.
- Integrated LLM-powered systems with advanced prompt engineering, enhancing response quality and reducing hallucinations.
- Built a Retrieval-Augmented Generation (RAG) system to combine LLMs with external knowledge sources for more accurate and context-aware outputs.
- Developed RESTful APIs for AI-driven workflows using FastAPI to streamline backend operations.
- Containerized AI systems using Docker and deployed them on cloud infrastructure for scalable hosting and accessibility.

AI Automation Intern Autolab Technologies PVT.LTD

Sept 2025 – Jan 2026
Kupandol, KTM

- Researched and evaluated data crawling and scraping strategies for dynamic and large-scale websites
- Designed and maintained scalable web crawling pipelines using Crawl4AI for high-volume data extraction
- Cleaned and normalized unstructured web data using LLM-based workflows to improve downstream usability
- Developed crawling configuration files to support pagination, session handling, and workflow automation
- Performed unit testing using pytest also conducted end-to-end system testing
- Performed prompt engineering to improve LLM response quality and reduce hallucination

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, C, C++, Java

Database: Postgresql, NoSQL(Mongodb), Vector Database(Qdrant, Chromadb)

AI/ML: TensorFlow, Scikit-learn, Transformers, NLTK, PyTorch, OpenCV, RAG, LangChain, HuggingFace

Data Visualization: Pandas, Numpy, Matplotlib, Seaborn

Web and Automation: MERN stack, FastAPI, Streamlit, Rest APIs, Redux, JWT Token, Playwright, Crawl4ai

Libraries & Tools: Git, Docker, Postman, Anaconda, Hoppscotch

PROJECTS

Documate- Helping your document (RAG APP)

[Github](#)

- Built DocuMate, an AI-powered document assistant that analyzes user uploaded documents and generates accurate, context-aware responses using a Retrieval-Augmented Generation (RAG) approach.
- Implemented document parsing, intelligent text chunking, vector embeddings, and semantic similarity search to ensure precise information retrieval with clear references to source documents.

ApplyRush – A Smart Job Portal

[Github](#)

- Developed a MERN-based job portal application enabling user authentication, job posting, smart job search, and CV upload with skill based job matching using TF-IDF and cosine similarity algorithms.
- Designed a scalable, modular architecture integrating React, Node.js, MongoDB, and Python-based recommendation services for skill-aware job matching, live update and career guidance.

City VS Village Image Classification

[Github](#)

- Developed an automatic image caption generation system that analyzes visual features using a CNN-based encoder and generates human-like captions through a sequence-based language model.
- Designed an efficient end-to-end pipeline combining deep learning, feature extraction, and natural language processing to produce context-aware and semantically meaningful image descriptions.

Scrappy – Google Map Scrapper & Insta Automation

[Github](#)

- Developed an automated Instagram analysis system using Python, Playwright, and LLM integration, where users provide a business Instagram URL and the system extracts recent post comments to generate sentiment analysis and customer perception insights about the company.
- Implemented automated browser interaction and data extraction workflows using user behavior simulation techniques such as dynamic delays, scrolling, and interaction patterns to enhance scraper stability and minimize detection.

SmartPass – Managing Passports

[Github](#)

- Developed an online passport application system for Nepal Government using the MERN stack(MongoDB, Express.js, ReactJS, Node.js).
- Integrated features such as esewa payment gateway, online application submission, admin management for reviewing and processing application, automatic email notification

EDUCATION

Bachelor's in Computer Science and Information Technology

National College of Computer Studies (NCCS)

10+2 Science

National School of Science (NIST) Final CGPA: 3.46

Secondary Education Examination

Srijana Gyan Sagar School Final CGPA: 3.70

CERTIFICATIONS

Building with Claude API

[CERTIFICATE](#)

Course Provider: Anthropic

Completed a comprehensive course on integrating the Claude AI model into systems, covering RAG (Retrieval-Augmented Generation), Prompt Engineering, and Model Context Protocol (MCP).

REFERENCES

- Available on Request