#### **EDUCATION**

#### Kathmandu University, Dhulikhel, Nepal

Bachelor of Engineering, Computer Engineering, February 2021 - present GPA: 3.9

#### • Relevant Coursework

 Data Structures & Algorithms, Linear Algebra, Probability & Statistics, AI, Data Mining

#### **PROJECTS**

#### MediQuery: Healthcare RAG System

Built a retrieval-augmented generation (RAG) pipeline using Llama2 and LangChain to answer medical queries from WHO datasets.

Fine-tuned embeddings with sentence-transformers and deployed a Flask API for inference.

# PatchIt: Pothole Management System

Trained a YOLOv8 model (89% mAP) to detect potholes from live ESP32-CAM feeds, integrated with a React/Node.js dashboard for municipal authorities.

# Sign AI

Developed a YOLOv5 model to classify 25+ ASL gestures in real-time using React for the front-end and Python for ML inference.

Award: Education Category Winner, KU Hack Fest<br/> 2023 – Nepal's largest in-person hackathon.

# DigiTour

Designed a AR application in Unity to showcase Panauti's historical sites, combining Cloud Anchors (Google ARCore) and marker-based triggers.

# COMPUTER SKILLS

**AI/ML**: TensorFlow, PyTorch, Scikit-learn, YOLO, Data Wrangling, Predictive Modeling, LLM (RAG, Fine-tuning)

Web/Mobile Development: React, Node.js, Flutter, REST APIs

Languages: JavaScript, Python, C, C++, Java, Dart, SQL,

Tools and Technologies: Git, VS Code, Unity, MongoDB, Firebase Math Foundations: Linear Algebra, Calculus, Probability & Statistics

# Leadership & Involvement

## • Microsoft Learn Student Ambassador

2023 - Present

- Actively engaged in promoting technical learning and organizing workshops for peers.
- Organizing Committee, KU HackFest 2022 and 2024 2022 and 2024
  - Contributed to the planning and execution of Nepal's largest in-person hackathon.

## INTERESTS

Artificial Intelligence and Machine Learning Data Science Web and App Development Human-Robot Interaction

Augmented Reality Development