Sunidhi Sharma

Computer Engineering Student

Budanilkantha, Kathmandu • +977-9861590633 • sunidhisharma3002@gmail.com

EXPERIENCE

AI Intern

NAAMII – Diyo.ai

Jwagal, Lalitpur

Aug 2025 – Nov 2025

Research Assistant

UGC – EMCS

http://emcs.ku.edu.np/

EDUCATION

Bachelor's in Computer Engineering

Dhulikhel, Kavre

Kathmandu University Recent semester GPA: 4.0

ACHIEVEMENTS

Real-Time Energy Consumption Monitoring and Prediction for University Campus

Co-author, Real-Time Energy Consumption Monitoring and Prediction for University Campus Accepted at the International Conference on Role of Energy for Sustainable Social Development, **IEEE PES** Nepal Chapter, Kathmandu, Nepal, 29–30 May 2025

- Enhancing Ethical Reasoning in Tiny Language Models via Fine-Tuning and Multi-Agent Consensus Accepted at the National Conference on Computer Innovations (NCCI) 2025
- Automated Generation of Calculus Derivative Animations Using Fine-Tuned Large Language Models:
 Bridging the Programming Expertise Gap

Accepted at University Scholar Conference, 2025.

• Retrieval-Augmented Generation for Theoretical Computer Science Education: A Comprehensive Evaluation Framework for Algorithm Analysis and Complexity Theory Accepted at University Scholar Conference, 2025.

RESEARCH

Legal Document Translation Tool

May 2024 - Present

Developed a deep learning model to translate Nepali legal texts into English with high accuracy and contextual clarity in collaboration with the Nepal Law Commission.
 GitHub: https://github.com/sunidhisharma03/Translating-Legal-Documents

Skills: Natural Language Processing (NLP), Machine Translation, Transformer Models, Data Preprocessing, Tokenization, PyTorch, Hugging Face and Model Evaluation

Argument Mining of Nepali District Court Verdicts

March 2025 - Present

 Creating the first annotated corpus of Nepali district court verdicts for argument mining, classifying text into Premise, Conclusion, and Non-Argument categories and developing baseline models for automatic argument detection and analysis.

Skills: Argument Mining, Text Classification, Corpus Annotation, Linguistic Analysis, Data Labeling, BERT-based Models

• Manim Equation Visualization

Project showcasing mathematical equation animations using Manim with code generation supported LLM. **Won Best Presenter at AI Crusade 2024** for clear and engaging visual explanations.

https://github.com/sunidhisharma03/Vague

Skills: Manim, Python, Large Language Models (LLMs) and Generative AI

Cosmira

An interactive orrery web app that visualizes celestial bodies, including planets and asteroids, and uses a machine learning model to predict asteroid hazards. Developed at NASA Space Apps Challenge, winning the People's Choice Award.

https://github.com/sunidhisharma03/Cosmira

Skills: Machine Learning, Data Visualization, React.js, Python (Flask/FastAPI), TensorFlow

• Early Detection of Alzheimer's

An ongoing **research project** involving qualitative analysis and deep learning algorithms to detect early signs of dementia through speech analysis, focusing on cognitive decline patterns in individuals aged 40 and above, in collaboration with esteemed professors at Kathmandu University.

Skills: Speech Processing, Audio Feature Extraction, Deep Learning, CNN/LSTM Models

GreenGuard

An innovative IoT and image processing-based plant disease detection system developed at KU Hackfest. Enables real-time monitoring, early disease identification, and data-driven insights for farmers using ESP-32, Arduino Uno, and ML techniques.

https://github.com/sunidhisharma03/GreenGuard

Skills: IoT Development (ESP32, Arduino), Image Processing, Computer Vision, TensorFlow/Keras and OpenCV

AWARDS

NRCC
2024
2024

CERTIFICATION

• DataCamp: Associate Data Engineer in SQL

LANGUAGE

English (Proficient), Nepali (Native), Hindi (Conversational)

REFERENCES

Available upon request.