Sugam Pokharel

Computer Engineering Student



Summary

Enthusiastic Computer Engineering student with a strong foundation in Machine Learning, Natural Language Processing (NLP), and Full-Stack Web Development. Passionate about building intelligent systems and solving real-world problems using modern technologies. Demonstrated ability to manage projects involving web, AI, and data science solutions.

Education

2021 - 2025 Bachelor of Computer Engineering, Thapathali Engineering Campus, Tribhuvan University

Relevant Machine Learning, Data Structures, Database Systems, Software Engineering

Coursework

Skills

Languages Python, JavaScript, SQL, HTML/CSS

Frameworks TensorFlow, PyTorch, React, Node.js, Express

Web MERN stack, REST APIs, Full-stack integration

GIS QGIS, ArcGIS, Leaflet.js, GeoJSON

Data Tools Excel, Power BI, Pandas, Matplotlib

Concepts ML algorithms, Neural Networks, NLP, Spelling Correction, Classification Models

Projects

- 2023 **MERN Website**, Developed a full-stack web app using MongoDB, Express, React, and Node., Repo
- 2024 **Nepali Spelling Correction**, Developed a Nepali spelling correction model using Transformer architecture for NLP text correction.
- 2024 **Amazigh Numbers Classification**, Built an Artificial Neural Network to classify Amazigh script digits using image data., Repo
- 2024 **ML Models from Scratch**, Implemented various ML models (Naive Bayes, ANN) without external libraries to understand fundamentals., Repo
- Nepal Hydropower Map, Built an interactive map visualizing Nepal's hydropower infrastructure using geospatial tools and Leaflet.js., Online Map
- 2025 **Gallic War Map**, Created an interactive online map for Julius Caesar's Gallic Wars using historical data and mapping technologies. Performed spatial data creation using offline sources., Online Map

Certifications & Achievements

Academic Successfully completed multiple software and Al-related academic projects. Projects

Hackathons Participated in local hackathons and student-led innovation programs.

Online Completed MOOCs related to AI and Web Development on Coursera and edX.

Courses

Languages

English Fluent Reading, Writing, Speaking

Nepali Native

Interests

Professional Machine Learning, Natural Language Processing, Web Development

Personal Map-making, History, Language Technology, Open-source Contributions