SUJAN KHATIWADA

COMPUTER ENGINEER | DATA SCIENCE & MACHINE LEARNING

Damak, Koshi Province, Nepal | sujankhatiwada321@gmail.com
LinkedIn: linkedin.com/in/er-sujan-khatiwada | GitHub: github.com/sujankhatiwada4x

PROJECTS

English to Nepal Bhasa (Newari) Neural Machine Translator 2025 – 2026

Lead Backend Developer | Bachelor's Final Year Engineering Project

- Fine-tuned Meta's NLLB-200 (distilled 600M parameter Transformer) model using PyTorch and Google Colab with gradient accumulation to address VRAM constraints.
- Architected an asynchronous REST API backend using FastAPI and Uvicorn to manage model inference, tokenization, and JSON translation mappings.
- Collaborated on integrating the Python backend with an interactive React frontend for real-time translation.
- Curated, tokenized, and processed a custom parallel corpus of 1,000+ sentence pairs to mitigate low-resource language scarcity.

Data Science & Predictive Analytics Workflow 2026

Python Data Science Project

- Implemented end-to-end data pipelines for data collection, cleaning, feature engineering, and exploratory data analysis (EDA).
- Applied supervised machine learning algorithms to model complex datasets using Scikit-Learn and evaluation benchmarks.

EDUCATION

Bachelor of Computer Engineering (EQF Level 6) 02/2022 – 03/2026

Madan Bhandari College of Engineering (Affiliated with Pokhara University) — Urlabari, Nepal

- Core Computer Science: Data Structures & Algorithms, OOP (C++, Java, Python), DBMS, Operating Systems, Theory of Computation.
- Hardware & Architecture: Microprocessors & Assembly, Computer Architecture, Embedded Systems, Logic Circuits, Computer Networks.
- AI & Software Engineering: Artificial Intelligence, Image Processing & Pattern Recognition, Object-Oriented Software Engineering, System Analysis & Design.

TECHNICAL SKILLS

Languages:	Python, JavaScript, C, C++, Java, SQL, HTML/CSS
Frameworks & ML:	FastAPI, Uvicorn, React, PyTorch, NLLB-200, Scikit-Learn, Pandas, NumPy
Developer Tools:	Git, GitHub, GitLab, VS Code, Google Colab, Docker, Anaconda, Linux
Core Concepts:	REST APIs, Asynchronous Programming (ASGI), NLP, Data Pipelines, Software Engineering

LANGUAGES

- English: C1 Advanced (Proficient)
- Nepali: Native / Full Professional Proficiency