HIMANI SHRESTHA

+977 9847390710 • himanistha78@gmail.com • Manamaiju, Kathmandu, Nepal
• linkedin.com/in/himanishrestha/ • github.com/HIMANIRANI

A passionate Computer Science undergraduate with hands on experience in python, data analysis, data pipeline, machine learning, and product development.

EDUCATION & CERTIFICATIONS

Bachelor's (Hons) in Computer Science
Herald College Kathmandu, Naxal, Kathmandu
2023 -2025 Percentage: 72%

Higher Secondary Education
Herald Int'l College
Science (Computer Science)
Grade: 3.49 2020-2022

Secondar Education Examination (SEE)
New Ceres English School

Grade: 3.60

2007-2020

TECHNICAL SKILLS

- Programming
- Python
- FastAPI
- MongoDB/SQL
- ML/AI
- Git
- Data Analysis
- Scrum
- SDLC
- OOP
- Figma
- Communication
- Team Player
- Problem Solving

PROJECTS

NEPSE-Navigator

Tech Stack: FastAPI, Transformers, FAISS, LangChain, GitHub, Open Source APIs

- Conducted market research on NEPSE data, broker regulations, and user pain points.
- Built data pipelines for preprocessing and indexing large document sets using FAISS and LangChain, enabling efficient semantic search and query reranking.
- Developed a stock market chatbot using LLM to deliver fundamental, technical, and policy-based insights.
- Created data pipelines for document indexing, query reranking, and multilingual support (Nepali-English).

VROOM- Car Rental Service

Tech Stack: ReactJS, NodeJS, CSS, JIRA, MongoDB, SDLC

- Acted as Project Manager and Scrum Master in a team and developed a car rental website
- Applied Agile methodology and managed task assignments using Gantt charts, JIRA, and WBS.
- Led sprint planning, meetings, issue tracking, and used GitHub for version control.
- Helped team members solve problems, assign tasks, and track progress.
- Created full project documents: User Manual**,** Client Presentation**,** and meeting minutes.
- Link to the github: Click Here

Course Management System

Tech Stack: Java (OOP), MySQL, Java Swing

- Developed a desktop application using Java (OOP) and MySQL, applying principles like inheritance, encapsulation, and modularity for scalable design.
- Designed a relational database with 7+ tables to manage academic data and support efficient storage, retrieval, and updates.
- Implemented a role-based access system with personalized dashboards and secure CRUD operations for Admin, Teacher, and Student users.

Movie Review Web Application

Tech Stack: HTML, CSS, JavaScript, Firebase, AWS S3, CloudFront

- Developed a movie review web application, implementing full CRUD operations with real-time data handling using Firebase Firestore as the backend database.
- Deployed the application on AWS S3 with CloudFront CDN, configuring bucket policies, static website hosting, and content delivery settings.

Caesar Cipher (Encryption/Decryption Program)

Tech Stack: Python

- Developed a command line-based program using the Caesar Cipher algorithm that supports both console and file inputs.
- Implemented input validation, shift logic and file handling.

Noughts and Crosses (Tic-Tac-Toe Game)

Tech Stack: Python, OOP

- Developed a command line-based Tic-Tac-Toe game against the computer with score tracking and win/draw detection.
- Implemented a menu system for game play, leaderboard saving using file handling and error handling.

News Category Classification

Tech Stack: Python, Scikit-learn, NLTK, Pandas, NumPy, Matplotlib, Seaborn

- Engineered an end-to-end machine learning pipeline for classifying sentiment in text data.
- Preprocessed raw text using NLP techniques such as tokenization, stop-word removal, and TF-IDF vectorization to optimize input features.
- Trained and evaluated multiple classification algorithms, including Multinomial Naive Bayes, Logistic Regression, and Support Vector Machines.
- Optimized hyperparameters and preprocessing strategies to enhance predictive performance and reduce overfitting.

ACADEMIC RESEARCH

Big Data in Environmental Audio: Assessing from Traditional Models to Neural Architectures (Unpublished Research Paper)

Tech Stack: PySpark, Librosa, CNNs, XGBoost, VGGI 6, Python, Matplotlib

Conducted market research on NEPSE data, broker regulations, and user pain points.

- Performed EDA and visualizations on the ESC-50 environmental audio dataset using PySpark to analyze large-scale, multi-class sound data.
- Engineered features (MFCCs, chroma, spectrograms) and compared ML models (SVM, XGBoost) with DL architectures (CNNs, VGGI 6, VGG-ish).
- Evaluated models using precision, recall, FI-score, and confusion matrices for performance benchmarking.
- Analyzed trade-offs between ML and DL approaches for applications in smart cities, biodiversity monitoring, and acoustic sensing.

SOCIAL LINKS

Linkedin: https://www.linkedin.com/in/himanishrestha/

Github: https://github.com/HIMANIRANI

Portfolio: himani-shrestha.com.np