

NIRAJAN BEKOJU

Computer Engineering Student

📍 Liwali, Bhaktapur-8

@ nirajan.bekoju@gmail.com

☎ 9843-965-781

🔗 <https://nirajanbekoju.github.io/>

🐙 <https://github.com/NirajanBekoju>

in <https://www.linkedin.com/in/nirajan-bekoju-2698631b5/>

TECHNICAL SKILLS

- **Programming Languages:** Python, C, C++, Julia, Matlab
- **Data Analysis and Visualization:** numpy, pandas, matplotlib, seaborn, plotly, cufflinks
- **Machine Learning and Deep Learning:** scikit-learn, Tensorflow, Keras, Pytorch, Tensorboard
- **Computer Vision (OpenCV Python)** and NLP
- **Cloud Computing:** AWS
- **Web Designing:** HTML, CSS, Bootstrap, React JS, three JS
- **Backend:** Flask, Django and Django Rest Framework
- **Version Control:** Git, Github, Gitlab, Bitbucket
- **Database:** Postgresql, MySQL
- Data Structures and Algorithms
- Sound knowledge of Software Development Life Cycle
- Object Oriented Programming
- Report making and Documentation using **Latex**
- Competitive Programming

ACHIEVEMENTS

- KU IT Meet 2023 - AI Competition - Won LLM Category
- Docsumo Dataverse 2023 - Won Data Insights Category
- First Position - Khwopa Manual Akhada Robot Competition 2018

EDUCATION

Bachelor in Computer Engineering

Pulchowk Engineering Campus

📅 Nov 2019 – April 2024

📍 Pulchowk, Lalitpur

Microdegree, Artificial Intelligence

Fuse Machines

📅 Jan 2023 – Jan 2024

CERTIFICATIONS

- Machine Learning by Stanford University on Coursera
- Neural Networks and Deep Learning by DeepLearning.AI on Coursera
- Convolutional Neural Networks on Coursera
- Natural Language Processing Specialization by DeepLearning.AI on Coursera
- AWS Academy Graduate - AWS Academy Cloud Architecting
- Bayesian Statistics : From Concept to Data Analysis by University of California, Santa Cruz on Coursera
- Web Designing Course from Broadway Infosys (Certificate No : B9628)

WORK EXPERIENCE

Freelance - Nepali Sign Language Recognition

- Implemented Spatial-Temporal Transformer Encoder and Standard Transformer Decoder for **Sign Language Recognition**
- Achieved 60% Word Error Rate in the test dataset.
- **Technologies Used:** Pytorch, Tensorboard, Mediapipe, Transformer

Freelance - Staff Management System

- Managed the staff during lockdown period.
- Implemented attendance | salary | notifications | notice management
- **Technologies Used:** Django, Django Rest Framework, React

PROJECTS

Transformer Based Model for Nepali Language Generation and Spelling Correction

- Achieved 110 perplexity on test data of Oscar Nepali Corpus
- Implemented Noisy Channel Model for Spelling correction
- Deployed on Hugging Face

Wine Quality Classification

- Study of various physio chemical properties of wine to classify their quality | Handle imbalanced datasets | Machine learning experiments

Topic Classification | Dataverse 2023

- Developed Arxiv Topic Classifier model and paper recommendation system
- **Technologies Used:** Tensorflow, Keras, numpy, pandas, seaborn, matplotlib, scikit-learn

Malignant and Benign Tumor Diagnosis Analysis and Prediction

- Analyzed and visualized data on Breast Cancer from Kaggle and predict whether the tumor is malignant or benign
- **Result:** Achieved 97.90 % validation accuracy

Fourier Transform Drawing

- Draw any 2D closed diagrams using DFT and to understand discrete fourier transform
- **Technologies Used:** OpenCV-Python3 for Image Processing to generate image coordinates and C++, SFML Library for graphics.