



Samip Timal

Machine Learning Engineer

PROFILE

Address

Golvatta Chowk, Imadole
Lalitpur, Nepal

Phone Number

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Website

samiptimal.com.np

Email Address

samip425@gmail.com

Date Of Birth

22 May 1999

Github

<https://github.com/samiptimal>

Kaggle

<https://www.kaggle.com/samiptimal>

LinkedIn

samiptimal

AWARDS

Merit-Based Scholarship

Kathmandu University June 2020

KU hackfest

KUCC club December 2020

MOOC COURSES

Machine learning

Coursera October 2019

Data Structure And

Algorithms September 2020

Coursera

NLP Specialization

Coursera May 2021

LANGUAGES

English

Very Fluent

Nepali

Native Tongue

Hindi

Fluent

OBJECTIVE

Data and coding enthusiast with strong math background and 2+ years of experience using predictive modeling, data processing, and data mining algorithms. Involved in Python open source community and passionate about Natural Language Processing.

EDUCATION

Kathmandu University, Kavrepalanchok
Bachelor's Degree Computer Engineering

(August 2018 - November 2022)

3.94 CGPA (~present)

Trinity International College, Dillibazaar
High School

(June 2016 - June 2018)

3.56 CGPA

SKILLS

Languages

Python, JavaScript, C, C++

Data Visualization

matplotlib, seaborn, plotly, Bokeh

Machine Learning / Deep Learning

Sklearn, Pytorch, Tensorflow, Keras

Other Tools & Libraries

numpy, pandas, Flask, Django, git, aws

PROJECTS

• Guitar Chord Recognizer

<https://github.com/samiptimal/Guitar-Chord-Recognizer>

Primary Goal: To recognize the chords played on a guitar.

Solution: Collected labelled **data** and created mel-spectrogram for every chords. Then a CNN was trained on it to recognize the chords.

• Image Search

<https://github.com/samiptimal/Image-Search>

Primary Goal: To search images in you PC by describing it in Natural Language.

Solution: It uses CLIP, a multi-modality model by OpenAI, to vectorize images and searched query. The image with minimum cosine distance is returned as a result.

• Captiongram

<https://github.com/samiptimal/Captiongram>

Primary Goal: To describe Image in Natural Language.

Solution: Collected labeled Flickr30k from Kaggle. A seq2seq model was trained on it. The encoder was a CNN, in particular InceptionV3. A single layer, unidirectional LSTM was used as decoder.

• Time-Series Prediction

https://github.com/samiptimal/Time_Series_Analysis

Primary Goal: To explore and learn about Time Series Data Analysis.

Solution: Learned about ARIMA and FbProphet algorithm for Time Series Analysis. I analysed a private data provided by my friend using these algorithms. The results were very satisfactory.

• Captcha Recognition

Primary Goal: To recognize the captcha in the image.

Solution: Labeled 300+ captcha images using LabelStudio and trained a YoloV5 on it. The detected word region was cropped and it was passed to a pretrained OCR **model** to recognize the captcha.

• Intruder Detector

<https://github.com/samiptimal/Intruder-Detector>

Primary Goal: To recognize when intruder enters a room.

Solution: A pretrained face-recognition **model** based on CNN was used to recognize an intruder.