# Srijana Raut

(+977) 9843552084 Lokanthali, Bhaktapur srijanarautofficial@gmail.com

Portfolio: Personal Webpage LinkedIn: Profile|Srijana

Highly motivated and passionate towards my career in the field of computer science aiming to contribute and enhance this field which should be benediction to the society.

#### **EDUCATION**

Bachelors in Computer Science and Information Technology,

Tribhuwan University, New Summit College 78.98 percent

Higher Education(HSEB),

V.S Niketan College, Science Major

School Leaving Certificate, Nepal Government,

Ideal Co-ed Academy 81.25 percent

2015 — 2019

2013 — 2015

2013 — 2015

2013 — 2015

#### EXPERIENCE

### Machine Learning Engineer / Fusemachines Inc.

Dec 2019 — Present

AI in Education

Hattisar, Kathmandu

- Created 8-10 course materials with slides, lectures, quizzes and 4-5 project assignments on various topics of machine learning, deep learning, reinforcement learning, and computer vision for 3-4 colleges.
- · Conducted Mathematics sessions. Participated in RL, Supervised and Unsupervised sessions.
- Trained ML Interns of 2020 batch

### **Proctoring System**

- Video streaming application deploy in BigBlueButton.
- Face detection using RetinaNet and MobileNet in backbone.
- Face verification using FaceNet and InsightFace.
- · Gaze estimation using model of openVino.

#### Intrusion Detection System

- Implemented random forest and autoencoder models to classify network traffic. being either benign or malware with the accuracy of 78 percent and 89 percent.
- Analyzed approximately 1 TB pcap files and visualized via TSNE.
- Researched various types of malware attacks such as Mirai Bot, Torjan, Ransomware.

# Al Intern / Naxa Pvt Ltd.

Jun 2019 — Oct 2019

Vehicles Detection and Tracking System

Naxal, Kathmandu

- Video Data Preprocessing and Cleaning imported from Drones.
- · Implement tracking algoriths using OpenCV.
- · Built a foundation on python, algorithms, git, Machine learning.

## Co-Founder / Swastha Naari

Feb 2019 — Present

Intersecting technology with the women health

Kathmandu, Nepal

- Monthly Webinars to women and girls.
- Digital Awareness to sexually active women.
- Advocacy and health campaigns targeting remote and semi urban areas.

## Mentor / Women Leaders in Technology

Sept 2018 — Present

Non-profit organization with vision to empower young women to become innovators and leaders

Kathmandu, Nepal

- Pair with Wlit fellow of 2020/21 batch
- Conducted monthly sessions in leadership skills, Supervise in ML projects.

#### **PROJECTS**

Pneumonia detection: Implemented a DenseNet model to detect pneumonia disease with accuracy up to 80 percent.

Flappy bird: Applied Deep Q-learning technique to create a Flappy bird game. Modified code to cross 100 scores.

**Plant's disease classification system**: Final year college project that classify the disease on plant by implementing CNN model from scratch and connected to andriod through ngrok.

**BaataiBaato**: Website build with html, css, javascript that shows the location. Data are collected from open source (OSM) and encouraged use of galli in Kathmandu with the help of interactive online maps, so that people use main roads less often, that then frees up main road for public transport.

Other projects: Emotion detection, Canteen Management System

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# **TECHNICAL SKILLS**

Languages Python, C, C++, Sql, **Databases** MySql, Oracle,

**Frameworks** Tensorflow, Pytorch, Sci-kit learn, Rasa, NLTK, PySpark,

**Tools** Pandas, Numpy, Scipy, Matplotlib, Seaborn, Git, Jupyter notebook, LTEX,

# **COMMUNICATION SKILLS**

Languages English, Nepali, Hindi

# **ACHIEVEMENTS**

Code Rush: Awarded as best social impacting idea, Presenter	Sept 2019
Open Knowledge Nepal: Open data Women Fellow,Research Presenter	2019
Women LEAD: Sujata Baskota Changemaker Award, Presenter	Feb 2019
Fellowship at Women Leaders in Technology	2019
First Nepal Winter School in AI: Selected as Participant	Dec 2018
Academic Student Association: Python and Data Science Workshop, TechTrix Organizer	2018
Some Coding Sprint, Techcamp by Microsoft Innovation Center Nepal	March 2017
Graduate Student Council Vice Secretary	2015 - 2016

#### REFERENCES

**Bhupendra Singh Saud** 

Bhupendra.Saud@newsummit.edu.np

+977-9849148483

• Program Coordinator / Lecturer at New Summit College

**Indra Chaudhary** 

Kathmandu, Nepal

Kathmandu, Nepal

indra.chaudhary@newsummit.edu.np

977-9808599362/977-9851201197

• Supervisor / Lecturer at New Summit College