# Sumit Yadav

Portfolio: sumityadav.com.np Github: github.com/rockerritesh

Kathmandu, Nepal

Running(8th Sem.)

Virtual

Lalitpur

2020 - 2021

Aug 2021 - Present

# Education

# Pulchowk Engineering College

• Bachelor of Computer Engineering;

Courses: Operating Systems, Data Structures, Data Mining, Artificial Intelligence, Machine Learning, Networking, Databases

## SKILLS SUMMARY

• Languages:	Python, C, C++, JavaScript, Bash
• Online Courses:	Deep Learning and GAN Specialization, Generative AI LLM, Image Understanding TensorFlow GCP
• Tools:	SSL, Matplotlib, GIT, Wolfram Alpha, MySQL
• Soft Skills:	Leadership, Event Management, Writing, Public Speaking, Time Management
Experience	
Ed-Acadia	Lalitpur
• Chief Data Oficer (Full-time) May 2022 -	
PDSC(Plan Design Solve Create)	
Software Coordinator (Full-time) May 2022	

- DeepLearning.AI
- GAN Mentor (Part-time) Robotics Association of Nepal
- AI and Robotics Member (Part-time)

• **Making Robotics based system**: Done research and project related to Computer Vision based on raspberrypi microcontroller.

#### Projects

- IRB (Image Recognition Based) Robotics Arm (Image Processing, Signal Processing, Actuator Control): Research oriented, open source, Project under UN's SDG3 - Good Health & Well-Being. Tech: Python, Arduino Programming, Arduino Toolkit, TensorFlow (May '2020)
- Microsoft Rice Disease Classification Challenge (Computer Vision): AI model to classify Rice plant disease & fastly and efficiently. Powered by ZINDI, LB score 0.077 and LB Postion 40. Tech: Python, Transformer(timm), Pytorch, Boosting Algorithm & Transfer learning. (August '2022)
- Nepali Language (Devanagari Classifier, Nepali Sentiment Classifier, Nepali OCR Nepali Poem Generator): In devanagari letter classifier trained vgg16 model(acc. 0.94), Nepali sentiment analysis using Devanagri Based Model, and a simple OCR based on API of easyOCR Tech: Keras, Transformer, Pytorch, TF-IDF, NLTK (Past 2 Years)
- Unsupervised Model (VAE, GAN, C- GAN, AC-GAN, DC-GAN): Research oriented, Project for learning the behaviour of latent space. Tech: Python, Numpy, Tensorflow (Sep, 2021)
- NEPSE Simple(Web Development, Web Scraping, Telegram Bot): Presented nepal stock market data in minimal environment constraint. Tech: Github Workflow, Automation in Scraping WebSockets, JavaScript, RSS, XML (Since 2020)

#### PUBLICATIONS

- SUPPORT VECTORS ARE A BETTER WAY OF TEXT CLASSIFICATION FOR IMBALANCED DATA: Present a robust SVC method for text classification (100+ classes) using termfrequency vectorization, achieving superior test data results over neural network.
- Machine Learning Analysis of Tirhuta Lipi: Achieved 0.97 accuracy in Tirhuta Lipi character recognition using mobile net embedding and logistic regression, with applications in translation and OCR for low-resource languages.

# Honors and Awards

- Winner of GritFeat AI Hackathon 2023, Locus Feb, 2022, (SWIFT' is a wearable devices with hardware and AI models that detect falls in elderly people with 0.7986 accuracy, resulting in immediate emergency alerts to contacts.)
- First RunnerUP of Dataverse, Locus Jan, 2022, Dataverse Solution (NLP pased problem to classify abstract.)
- Winner of Best AI Project of Deltathon, DELTA 3.0 Jan, 2022, Nepali Harvest (Designed a portal to help farmers that can predicting diseases, identifying optimal harvest times, and aiding with crop health assessment.)
- Winner of Image Challenge, IT-Meet UP KU Sep, 2022 (Have to train AI model to classify image of Ballot paper.)
- Winner of Capture The Flag, LogPoint Feb, 2022 (Tasked of finding information and exploiting a binary file.)
- Runner's Up at DATARUSH by DOCSUMO Feb, 2022 (NLP based model for classifying Abstract into Classes.)

# Social Experience

• Joint Secretary at NTBNS Student Clubs, IOE, Pulchowk Campus Conducted technical training & Organized nepal largest sarswati puja Program. Lalitpur, Nepal Jan 2020 - Present

- Tutor of Children In Technology- WorldLink
- Aware the student about Risk and Safety of Internet.