

# Ashim Dahal

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## SKILLS

Languages: Python, C++, SQL, Javascript, HTML, CSS, PHP

Frameworks: PyTorch, Tensorflow, Keras, Flask, FAST API, Matplotlib, Pandas, Numpy, Scikit-learn, JQuery

Technologies: Git, Github, PostgreSQL, REST, Linux, Machine Learning, Chat-GPT

## PROJECTS

**Jelly** | [github](#), Flask, Python, Hugging Face, BlenderBot, Javascript [🔗](#)

- Combined the power of hugging face's transformer models and google translate scraper to create Nepal's first Romanized Nepali chatbot
- Conducted research on Human Computer Interaction with native language and published paper with **400+ reads** | [paper](#) [🔗](#)

**torchy** | [github](#), Python | PyTorch [🔗](#)

- Added fit, \_accuracy, validate, and utility functions to nn.Module while enabling trained models to have history attributes thus increasing development speed while training and testing/plotting
- Equipped torch.data.utils module with Device Dataloader and percentage split, thus increasing the core functionality of PyTorch's data utilities and **published the project on pipy with 18 stars on github** [🔗](#)

**Frida** | [github](#), Pandas | PyTorch | Matplotlib | FAST API | SQL | BS4 | NLTK [🔗](#)

- Mapped landslides occurrences with weather conditions data by using pandas and built ANN model with 99.9% accuracy on validation
- Scraped latest climate change related news from google news, stored them in a database and presented their readable summary using NLP

**Jov.ai** | [github and demo](#), mini gauGAN | Pytorch | Python | [🔗](#)

- Created an AI powered image editing application with a GAN component that generates images like the ones captured by the JunoCam
- Documented the working process and made an introductory video resulting in our team being Global Nominee at NASA Space Apps Challenge 2022 [🔗](#)

## PROFESSIONAL EXPERIENCE

Jul 2022 – Jul 2023  
Kathmandu, Nepal

**Data Research Council for Students**, Machine Learning Consultant and Core Member [🔗](#)

- Taught 450+ high school, undergraduate and graduate level students equipping them with the fundamental concepts of python, machine learning and deep learning
- Conducted individual research on best Deep Learning practices and wrote research paper on findings with **150+ reads** | [paper](#) [🔗](#)
- Played a pivoting role on conducting bootcamps by collaborating with other tech communities, brands, and bringing in 10+ volunteers onboard for multiple occasions

Jan 2022 – Aug 2023  
Kathmandu, Nepal

**Together We Learn**, Founder and President [🔗](#)

- Wrote 20+ newsletters to provide learning resources to more than 300 students, helping them to learn python, machine learning, arduino and programming in general
- Researched the socio economic and human computer interaction aspect of adaptation of robots with over 300+ survey respondents and **500+ reads** | [paper](#) [🔗](#)
- Worked closely with board members, managing over 10 events like school outreach programs, python bootcamps, hour of code, research paper reviews, Interview sessions and technical webinars impacting over 1000 students

Jul 2022 – Nov 2022  
Lalitpur, Nepal

**Robotics Association of Nepal**, Research and Development Intern [🔗](#)

- Taught the fundamentals of robotics to 900+ students in 3 different schools under project “Ujjwal Education”
- Built DOCR CNNs with over 97% accuracy and penned down the documentation and findings of the project with **150+ reads** | [paper](#) [🔗](#)
- Created fingerprint matchers, object detection systems and vegetable classification models using CNNs, OpenCV, TensorFlow and Sqlite3 with over 90% accuracies

## EDUCATION

Aug 2023 – present  
Hattiesburg, USA

**The University of Southern Mississippi**, Bachelors in Computer and Information Science  
Freshman at the USM.