Ashim Dahal

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🎓 EDUCATION

Aug 2023 – present Hattiesburg, USA	**Bachelors in Computer and Information Science,** The University of Southern Mississippi Executive member at Nepalese Student Association, GM at Southern Miss Alumni Association.

💼 PROFESSIONAL EXPERIENCE

Sep 2023 – present
Hattiesburg, United States

Research Assistant, Cyber Innovations Lab
- Leading a team of 3 undergraduate students under guidance of Dr. Nick Rahimi in the fusion of Cyber-Security and Machine learning
- Handled heavily imbalanced dataset with 4.8 million entries with 2 anomaly samples using various standard and newly fabricated approaches.
- Timely submitted team reports and updates on teams while also guiding the team members on navigating resources, completing every goals of the sprint before deadline

Jul 2022 – Jul 2023
Kathmandu, Nepal

Machine Learning Consultant, Data Research Council for Students 🔗
- Deployed over 10 microservices to 3 different startups powering their internal tools and software with data driven decisions and machine learning protected emails
- Taught in over 4 different bootcamps empowering 450+ high school, undergraduate and graduate level students 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 **200+ reads | paper** 🔗
- Scoured the internet to establish a dataset to detect landslides using deep learning techniques with 99.8 percent accuracy for the first time in Nepal. 🔗

Jan 2022 – Jul 2023
Kathmandu, Nepal

President, Together We Learn 🔗
- Researched the socio economic and human computer interaction aspect of adaptation of robots with over 300+ survey respondents and **600+ reads and presented in NAST Conference| paper** 🔗
- Worked closely with board members, managing over 30 technical newsletters on python, arduino, general tech, etc. and 10 mega 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

Research and Development Intern, Robotics Association of Nepal 🔗
- 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 **340+ reads and a citation in IEEE| paper** 🔗
- Built fingerprint matchers, object detection systems and vegetable classification models using CNNs, OpenCV, TensorFlow and Sqlite3 with over 90% accuracies

📁 PROJECTS

Jelly | github, Flask, Python, Hugging Face, BlenderBot, Javascript 🔗
- Developed and deployed Nepal's first romanized Nepali chatbot with over 500 weekly users seeking fun and mental help
- Conducted research on Human Computer Interaction with native language and published paper with **500+ reads | paper** 🔗

torchy | github, Python | PyTorch 🔗
- Created a PyTorch wrapper that has fit , _accuracy, validate, and other utility functions in nn.Module while enabling trained models to have history attributes thus increasing development speed
- 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** 🔗

Jov.ai | github and demo, mini gauGAN | Pytorch | Python | 🔗
- Created an AI powered image editing tool that generates images like the ones captured by the JunoCam and colors them
- Documented the working process and made an introductory video resulting in our team being **Global Nominee at NASA Space Apps Challenge 2022** 🔗

🧠 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