Utsav Acharya

An ever learning Computer Engineering student with a strong foundation in Mathematics, Data Science, Machine Learning, and Backend Development fundamentals and person with an urge for continual learning, problem solving and innovation.

WORK EXPERIENCE

Student Trainee 04/2025 - Present

NAAMI

Conducting computer vision research in the physics lab focused on:

- **Disease detection** in rice crops
- Behavioral monitoring of poultry

Backend Engineer and Data Scientist

11/2023 - present

Omdena &

Participated in the following real-world deployed projects:

- Combatting illegal deforestation in Romania $\mathscr D$
- Mapping Seagras Meadows ∂
- Agriculture Analysis on Kenya ∂

Data Science and Business Analytics Intern

09/2023 - 10/2023

The Sparks Foundation

- Created raspberry pi app for **Tomato Disease Classification** *ℰ*
- Did Exploratory Data Analysis on IPL 2023 @

ACADEMIC PROJECTS

Compliance Guide *⊘*

The Compliance Guide saves you countless hours by simplifying complex policy documents and compliance frameworks, helping you ensure seamless security and a gap-free product.

- Used Lllama for summariser
- Increased accuracy to upto 95% using RAG
- Used locally hosted Llama as comparator
- Used **Streamlit** for creating dashboards

Volt Vision ∅

Energy demand forecasting for Nepal households.

- Used pandas for data analysis and Xgboost for demand forecasting.
- Used Sarimax and Arimax model for time series analysis and price forecasting.
- Deployment Pipelines for Energy Demand Forecasting System using ZenMl/MLflow

Rakhsak 🔗

An all-in-one safety application designed to provide **real-time updates** on accidents, floods, and other hazards.

- Used Nextis for frontend
- Used Fastapi as backend with mongodb dataset
- Use **Beautiful Soup** for webscrapping

Guardian Shield 🔗

Guardian-Shield is a browser extension designed to enhance your online security by detecting and preventing common fraud and phishing attempts in your emails.

- Used Chrome apis for extension
- Used **Bert Transformer** and **Pytorch** for spam detection
- Use Peagsus Transformer and pytorch for terms and conditions summarizing.

EDUCATION

Bachelor's in Computer Engineering

Pulchowk Engineering Campus Average Percentage: 82.4 2023 – present Kathmandu, Nepal

High SchoolCapital College and Research Centre

2021 – 2023 Kathmandu, Nepal

apitai College ana Research C GPA: 3.91 + 3.73

SKILLS

Languages — Python, C, C++, JavaScript

Frameworks — Numpy, Pandas, Flask, Fastapi, Django, Matplotlib, Seaborn, Scikit Learn, TensorFlow, OpenCV, spaCy, React

Developer Tools — Git, Docker, VS Code, Tableau

AWARDS

National IT Olympiad Silver Medalist STEM, Nepal	2022
National Hackathon Winner LOCUS	2024
Runner UP:- Nepal Hacks Security Pal, NAAMI	2024
Specialist, National top 10 Codeforces	2024
Tribhuwan University Merit-Based Scholarship Tribhuwan University	2023
National Physics-Mathematics Olympiad Bronze Medalist SOMES Nepal	2021

CERTIFICATES

- Google Advanced Data Analytics ℰ
- Tensorflow Developer Professional Certificate &
- IBM Data Science Professional Certificate &
- Meta Backend Professional Certificate ℰ
- Stanford Machine Learning Specialization *∂*

RESEARCH INTERESTS

- Computer Vision for Agriculture and Environmental Monitoring
- Natural Language Processing for Compliance and Policy Analysis
- AI-based Risk Assessment and Automation

LEADERSHIP & EXTRACURRICULARS

Data Research Council For Students

11/2022 - 12/2023

Core Member

- Mentored **200+ students** in **intermediate Python**, providing guidance and support to help them improve their skills.
- Managed GitHub repositories, social media accounts, and Discord servers, ensuring that these platforms were up-to-date and effectively engaged with our community.

Together We Learn 03/2022 - 08/2023

Co founder

- Co-founded and led an organization of 500+ members
- Conducted **5+ webinars** on programming-related topics, sharing knowledge and insights with a broad audience.
- Wrote 10+ newsletters focused on data science and programming in general, providing valuable information and updates to 200+ subscribers.