# Saksham Sapkota

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# Summary

AI/ML enthusiast with a strong academic foundation, ranked top 10 in IOE Entrance 2078. Experienced in real-world AI projects and leadership roles in student organizations. Passionate about solving practical problems using deep learning and data-driven approaches.

#### Education

Institute of Engineering, Pulchowk Campus, Bachelor's in Computer Engineering

Apr 2022 - July 2026

- Aggregate: 81.76 %
- Coursework: Computer Architecture, Artificial Intelligence, Data Structures and Algorithms, Project Management, Software Engineering

Orchid Science College, Bharatpur, Chitwan, +2, Science

July 2019 - Sept 2021

- GPA: 3.59
- Coursework: Calculus, Algebra, Physics, Computer Overview, Chemistry

# **Experiences**

Mentor, ClampHook Academy - Kupondole, Lalitpur

May 2023 - Present

- Working as a mentor for students appearing for the Institute of Engineering, Entrance Examination
- Volunteered as a Computer-Based Test invigilator.

Hostel Prefect, Pulchowk Campus Boys Hostel – Pulchowk, Lalitpur

Aug 2023 - July 2024

- Elected member of the Hostel Prefect Committee
- Supervised and managed hostel activities, ensuring a safe and disciplined environment for over 390 students.

Executive Member, Chitwan Engineering Students Association – Pulchowk Campus

Mar 2023 - Mar 2024

- Organized 3+ major student welfare events, including a blood donation campaign, book distribution, and clothes donation
- Developed leadership and teamwork skills while contributing to the campus community.

#### Event Organizer, LOCUS - Pulchowk Campus

Jan 2023

- Managed logistics and setup for 2 major robotics competitions: RoboPop and Dronacharya with 20+ participants in LOCUS 2023
- Marketing team member to reach out to sponsors
- Worked as a volunteer for the LOCUS Photography Competition.

#### **Project**

#### **Grape Disease Identification**

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Developed a deep learning-based grape disease detection system using Convolutional Neural Networks (CNN). This system accurately identifies grape plant diseases from leaf images and features a web interface for users to upload images and receive instant disease predictions.

- Key Features: 98% accuracy in disease detection, user-friendly web interface for real-time predictions.
- **Skills Acquired:** Expertise in CNNs, Data Augmentation, Pooling, Dropout Regularization, Hyperparameter Tuning, TensorFlow Pipelines, and FastAPI.
- Tools Used: Python, TensorFlow, FastAPI

#### Certifications

#### Machine Learning Specialization, Coursera, Deeplearning.AI

Link

- Developed and trained machine learning models using NumPy, scikit-learn, TensorFlow, and various algorithms, including linear/logistic regression, decision trees, and neural networks for prediction, and classification.
- Hands-on experience in Machine Learning Algorithms like clustering, anomaly detection, collaborative filtering, content-based filtering for recommender systems, and reinforcement learning.

## Data Visualization, Kaggle Learn

Link

- Learned about powerful Python libraries like Seaborn, and Matplotlib
- Applied theoretical understanding and coding to visualize different varieties of data and their relation

## Career Essentials in Generative AI by Microsoft and LinkedIn, LinkedIn Learning

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• Learned to make use of Copilot and Microsoft365 and understood about AI Ethics, Search Engines vs Reasoning Engines, and Intro to Artificial Intelligence.

#### Intermediate Machine Learning, Kaggle Learn

Link

• Gained experience in some intermediate Machine Learning Algorithms like Decision Trees, XGBoost, etc.

## Intro to Machine Learning, Kaggle Learn

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• Developed an understanding of Machine Learning and some Machine Learning Algorithms.

# **Additional Experience And Achievements**

Member, IEEE Pulchowk Campus: Working as a member at IEEE Pulchowk Campus Student Branch.

**Organizer, Blood Donation (June 2023 | June 2024):** Organized Blood Donation in collaboration with the Himal Blood Transfusion Center, that collected over 120 units of blood.

**IOE Entrance 2078 Rank 10:** Achieved Rank 10 in Institute of Engineering, Entrance Exam, 2078, and was honored with the title of Chitwan Topper by CESA.

## **Skills Summary**

Languages: C/C++, Python, HTML, JavaScript, Java, SQL

Frameworks: Numpy, Pandas, Matplotlib, Seaborn, Scikit-Learn, TensorFlow, Streamlit

Tools: Excel, Photoshop, Capcut, Lightroom, Git

Platforms: Visual Studio, Google Colab, Jupyter Notebook, PyCharm

**Soft Skills:** Public Speaking, Team Collaboration, Leadership, Communication

Personal Interests: Singing, Guitar, Piano, Harmonium, Dancing