

SAMRAT KUMAR ADHIKARI

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Lalitpur, Bagmati, Nepal

OBJECTIVE

Seeking a position in Artificial Intelligence as a trainee to leverage my expertise in machine learning, data analysis, and software development. Aiming to contribute to innovative projects that combine AI with practical problem-solving.

EDUCATION

- Kantipur Engineering College** 2021 - Present
Bachelor of Computer Engineering Dhapakhel, Lalitpur
- Motherland Secondary School** 2020
Higher Secondary Level Education Pokhara, Kaski
◦ GPA: 3.64/4.00
- Global Collegiate School** 2017
Secondary Level Education Pokhara, Kaski
◦ GPA: 3.80/4.00

PROJECTS

- SignScribe: ASL Classification** 2023
Tools: [TensorFlow, OpenCV, MediaPipe] [\[G\]](#)
 - Developed a real-time sign language classification model for recognizing American Sign Language (ASL) hand signs
 - Implemented background subtraction techniques using OpenCV to enhance model accuracy, achieving robust classification performance
 - Created an interactive web interface with Streamlit for user-friendly model interaction, ensuring accessibility and ease of use
 - Applied MediaPipe for hand tracking and feature extraction, optimizing the system's ability to accurately interpret hand signs
- FeatherFind: Bird Audio Classification** 2024
Tools: [Librosa, TensorFlow] [\[G\]](#)
 - Developed a model to classify bird species based on audio recordings, with a focus on real-world application for accurate bird identification
 - Leveraged Librosa for sophisticated audio processing and feature extraction to enhance classification accuracy
 - Implemented data augmentation techniques to enrich the training dataset, ensuring model robustness
- Q-tips: Question & Answer Generator** 2024
Tools: [Transformer, NLTK] [\[G\]](#)
 - Developed a machine learning model for generating questions and answers from text, aiming to improve automated content generation and information retrieval
 - Utilized transformer architectures, such as BERT and GPT, for advanced natural language understanding and response generation to enhance the relevance and accuracy of generated content
 - Implemented data augmentation and fine-tuning techniques on large-scale text datasets to optimize model performance and ensure high-quality question-answer outputs

PUBLICATIONS

C=CONFERENCE

- [C.1] Samrat Kumar Adhikari, et al. (2024). **American Sign Language Classification using CNNs: A Comparative Study**. In *International Journal on Engineering Technology (InJET)*, pp. 283-295. Kantipur Engineering College. April 2024, Kathmandu. DOI: 10.3126/injet.v1i2.66704

SKILLS

- **Programming Languages:** Python, JavaScript, C++, C
- **Web Technologies:** HTML, CSS, JavaScript, React, Node.js, Express.js, Flask
- **Database Systems:** MySQL, MongoDB, PostgreSQL, SQLite
- **Data Science & Machine Learning:** TensorFlow, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, Plotly
- **Cloud Technologies:** AWS Cloud, Microsoft Azure
- **DevOps & Version Control:** Git
- **Specialized Area:** Natural Language Processing, Computer Vision, Audio Processing, Artificial Life
- **Mathematical & Statistical Tools:** MATLAB
- **Other Tools & Technologies:** Linux, Bash, VS Code, Jupyter Notebook
- **Research Skills:** Literature Review, Statistical Modeling, Academic Writing

AWARDS

- **IOE Hult Prize Finalist** 2024
Hult Prize Foundation
 - Selected as a finalist in the Hult Prize IOE
 - Recognized for proposing a sustainable solution to plastic waste management
- **Winner at Rapid Coding** 2024
Aarohan 2.0
 - Secured first place in a fast-paced competitive programming contest
 - Acknowledged for outstanding performance in algorithmic challenges.

LEADERSHIP EXPERIENCE

- **Organizer at KEC LITE** 2024
Kantipur Engineering College
 - Coordinated event logistics and managed a team of volunteers
 - Led the introduction of interactive workshops, enhancing attendee engagement
- **Organizer at AWS GenAI Bootcamp** 2024
AWS Cloud Club, Nepal
 - Oversaw event planning and speaker coordination
 - Implemented hands-on sessions, improving participant learning outcomes

VOLUNTEER EXPERIENCE

- **Volunteer at Blood Donation Camp** 2022
Kantipur Engineering College
 - Coordinated donor registrations and managed logistics during the event
 - Impact of your volunteer work
- **Volunteer at KEC Tech Talk** 2023
Kantipur Engineering College
 - Supported event planning and facilitated speaker engagement

CERTIFICATIONS

- **Microsoft:** [Fundamentals of Generative AI](#) Jan 2024
- **AWS:** [Machine Learning Camper](#) May 2024
- **Postman:** [Postman API Fundamentals Student Expert](#) Sep 2024

ADDITIONAL INFORMATION

Languages: Nepali, English, Hindi
Interests: Sports, Music, History, Philosophy, Technology

REFERENCES

1. **Er. Pralhad Chapagain**

Division Assistant, Research, Training and Consultancy Division (RTCD)

Kantipur Engineering College

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Relationship: Research Supervisor

2. **Er. Rabin Ghimire**

ML engineer

Fusemachines

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Relationship: Mentor

3. **Er. Upendra Prasad Neupane**

Cloud Club Captain

AWS Cloud Club, Nepal

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Relationship: Mentor