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 Bachelor of Computer Engineering 2021 - Present Lalitpur, Nepal

Motherland Secondary School

202

Higher Secondary Level Education

Pokhara, Nepal

o GPA: 3.64/4.00

• Global Collegiate School

2017

Secondary Level Education

Pokhara, Nepal

o GPA: 3.80/4.00

PROJECTS

• SignScribe: ASL Classification

2023

Tools: [TensorFlow, OpenCV, MediaPipe]

 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]

- 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]

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- 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 Feb 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

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

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

Kantipur Engineering College

- Coordinated donor registrations and managed logistics during the event
- Impact of your volunteer work

Volunteer at KEC Tech Talk

Kantipur Engineering College

• Supported event planning and facilitated speaker engagement

CERTIFICATIONS

Microsoft: Fundamentals of Generative AI
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

Email: pralhadchapagain@kec.edu.np Phone: +977-9849867329 Relationship: Research Supervisor

2. Er. Rabin Ghimire

ML engineer Fusemachines

Email: ghimirerabin737@gmail.com

Phone: +977-9824332602 Relationship: Mentor