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Technical Skills

Programming Languages: Python, JavaScript, Dart, TypeScript, Java, C/C++, LaTeX

ML Libraries/Frameworks: TensorFlow, PyTorch, Pandas, Numpy, Scikit-learn, NLTK, OpenCV, LangChain, Darts, HuggingFace, Roboflow

Web Frameworks: React.js, Django, Flask, FastAPI, Express.js, Node.js, Socket.io, Streamlit, Apache Kafka

Development Tools: Linux, Unix, Docker, Kubernetes, Git

Database: MongoDB, PostgreSQL, Oracle, MySQL, Vector Database

Cloud Services: AWS(EC2, Lambda, S3, Sagemaker), BentoML, Microsoft Azure, GCP(App Engine, Cloud Functions), Pinecone, ChromaDB, Linode

Work Experience

Omdena

Aug. 2024 – Present

Machine Learning Engineer

Freelance, Remote

- Collaborating with global teams to develop and deploy innovative AI solutions for real-world problems.
- Contributing as a machine learning engineer in various open-source projects.
- Collaborating on AI Innovation Challenges with companies and non-profit organizations to develop machine learning solutions for real-world problems in areas such as climate change, healthcare, and social impact.

Inflancer Technology

Aug. 2024 – Oct. 2024

Machine Learning Engineer

Kathmandu, Nepal

- Built and deployed a recommendation system for a social media platform using Python, CLIP, HuggingFace, and Docker.

Milo Logic Pvt.Ltd

March 2024 – July 2024

Associate Software Engineer

Kathmandu, Nepal

- Implemented a full-stack ATS system to rank a long resumes list using FastAPI, NLTK, Spacy, Huggingface, and Docker.
- Helped to build a Salary Management System using Django.
- Implemented a professional head-shot photo generator using the Custom Stable Diffusion Model.
- Built a scalable web scraper to scrape data from Facebook, Instagram, and TikTok posts using Puppeteer, Brightdata, and FastAPI.

Department of Electronics, Computer Technology, and Projects, UPCT

Sep. 2023 – Feb. 2024

AI Research Intern

Cartagena, Murcia

- Implemented an explainable machine learning model, achieving a 94% accuracy in detecting Left Bundle Branch Block, improving patient outcomes.
- Implemented ML/DL algorithms collaboratively, achieving over 90% accuracy.
- Designed and applied machine learning algorithms for bearing fault prognosis.
- Created a versatile end-to-end pipeline for diverse machine learning applications.

Unisala

May 2023 – Jul. 2023

Software Developer

Remote

- Addressed bugs in Unisala's website, enhancing the overall performance of the site.
- Explored independent scaling for frontend, backend, server, and database at Unisala, utilizing the Atlassian agile framework and gaining expertise in bulk searching and various algorithms.

Youth Innovation Lab

Nov. 2022 – Mar. 2023

Software Developer Intern

Kathmandu, Bagmati

- Prototyped a full-fledged admin portal using Refine.
- Contributed to real-time notification implementation on shikshya.org
- Implemented advanced Django concepts (django-channels, mixins, custom view) while debugging APIs for Bipad Portal.

Education

Hochschule Bielefeld <i>Master of Science in Data Science (Research Master)</i>	March 2025 – Present Bielefeld, Ostwestfalen-Lippe
Nepal Engineering College <i>Bachelor of Engineering in Computer Engineering (CGPA: 3.89 / 4.00)</i>	Sep. 2018 – Aug. 2023 Bhaktapur, Bagmati

Volunteering Experience

Instructor – NecIT Club	Nov. 2022
Conducted a day-long Python Basics Programming workshop and a JavaScript and DOM webinar for over 25 students, covering fundamentals, coding best practices, career opportunities, and profile building.	

Technical Projects

Combating Plastic Pollution in the River Ganges Using Computer Vision <i>PyTorch, ONNX, Roboflow, Streamlit</i>	Feb. 2025
Developed and deployed an AI-powered instance segmentation system using YOLOv8 for real-time plastic waste detection in rivers from video feeds.	
Predicting Dengue Fever Outbreaks in Sri Lanka <i>Darts, Sci-kit Learn, SHaP, Streamlit</i>	Oct. 2024
Contributed to an Omdena project developing an AI-driven system for dengue outbreak prediction in Sri Lanka, using time series analysis and machine learning to improve early warning and public health response.	
Driver Drowsiness Detection <i>Tensorflow, OpenCV, Django, CNN</i>	Sep. 2023
Smart application using deep learning, accurately determines if the driver is awake or asleep, achieving a 96% accuracy rate	
MediLeaf <i>Tensorflow, Scikit-Learn, DVC, Django, FastAPI, Flutter, Docker, CNN</i>	July 2023
An Android application powered by an AI model having an accuracy of more than 95%, helps users identify medicinal plants and their properties effortlessly by scanning the leaves of any plant.	
Lucy <i>PyTorch, Scikit-Learn, FastAPI, React.js, Docker, PostgreSQL, Transformers</i>	Nov. 2022
Lucy is an NLP-Powered chatbot with an accuracy of 90% that can interact with humans, and answer questions which are related to Nepal Engineering College.	
Glisir <i>Express.js, React.js, API, MongoDB, Stripe</i>	Oct. 2021
Glisir is a Nepali freelancing platform. Here you can find jobs and also apply for jobs as freelancers.	
Freyja <i>Tensorflow, Gensim, Django, React.js, Docker, Nginx, LSTM</i>	Sep. 2020
A web app for essay grading using an LSTM model with Django REST, React, and Tensorflow. Recognized as the education category winner at Quantum Hack 2020, the project represents an end-to-end deep-learning application	

Achievements

- Awarded a scholarship for the **Erasmus+ KA1 Mobility Program** at **Universidad Politécnica de Cartagena**, Spain, from September 2023 to February 2024.
- Attained Dean's List honours for outstanding academic performance in **B.E. Computer Engineering** at **Pokhara University**.
- Education category winner at **QuantumHack**, a 24-hour-long hackathon involving 240 participants from all around the world.
- Recipient of a full scholarship for **B.E. in Computer Engineering** at **Pokhara University**, September 2018.