Om Prakash Sharma

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PROFESSIONAL EXPERIENCES

Lead AI/ML Engineer @ acAIberry.io **Oct 2024-Present**

- Building AI Solutions for Education, Designing and Optimizing AI Inference Pipelines for Real-Time Deployment, Ensuring Efficient Model Performance and Scalability with AI Inference Deployment on Microsoft Azure and Multi-Cloud Orchestration

Nepal Cloud Professionals — Board Member Sep 2022–Present

- Manage and administer Microsoft 365 Admin Center, Microsoft Entra ID, Microsoft Defender, Microsoft Purview Compliance, Exchange Admin Center, and Microsoft Azure environments.
- Serve as a **community trainer**, conducting workshops and knowledge-sharing sessions on Microsoft Azure, Microsoft 365 Security Compliance, and Cloud Infrastructure best practices.

Google Summer of Code 2024 Participant with Drupal Association May 2024-Nov 2024

- Contributed for Drupal GenAI Orchestration Platform for Drupal 10 in ECA Module

TCIOE-EMIS Web Development Team

Product Manager / DevOps Engineer Jan 2023–Dec 2024

- Responsible for overall project coordination, scheduling, and communication. Manages deployment, infrastructure, and automation processes for College Website using Azure DevOps.

RESEARCH EXPERIENCE

Space Generation Advisory Council Research Fellow SGAC

- Research on how Liability Allocation and IP Protection are realted with On-orbit Servicing, In-space Assembly and Manufacturing, Rendezvous and Proximity Operations

Duke University x IOE Bass Connection Earthquake Early Warning Research Fellow KTMGEOLAB

- Developing IoT-Based Seismic Sensor Systems Using ESP32 for Real-Time Seismic Data Acquisition and Leveraging MQTT for efficient data transmission for Early Earthquake Warning in Kathmandu, Optimizing PCB Design and Hardware Integration, enhancing PCB layouts for improved geophone signal processing, enabling reliable noise mitigation, and integrating high-performance ADC components.

Teaching Assistant, Fifth Annual Nepal AI School (ANAIS 2024) NAAMI

- Assisted in delivering lectures and hands-on sessions on **Geometric Deep Learning**, **Graph Neural Networks (GNNs)**, and **Foundation Models**.
- Covered topics such as **message passing** in GNNs, **self-supervised learning**, and **fine-tuning** large language models (GPT, PEFT, LoRA). Provided technical guidance on implementing **GNNs** with **PyTorch Geometric** and machine learning baselines for **agricultural modeling**.

SKILLS

Languages: HTML, CSS, PHP, JavaScript, C, Python, C++
Tools: Git, Arduino, Docker, Librosa, Numpy, Pandas, Matplotlib, LaTeX, 3D Design and Printing
Library/Frameworks: TensorFlow, PyTorch, WordPress, SaaS, Bootstrap, jQuery
Databases: MongoDB, MySQL, MinIO, Cloud Databases, Redis, PostgreSQ
Platforms: Linux, Microsoft Azure, Google Cloud, Kaggle, Google Colab

LICENSES, TRAININGS AND CERTIFICATIONS

Microsoft Certified: Azure Administrator Associate (AZ-104) Microsoft
Practical Virtualisation with Hybrid Strategies - AWS Focused APRICOT 2025
APNIC Certified IPv6 Associate APNIC Academy
Using AWS ML for Image Analysis Genese Solution

Introduction to ICANN, Brief History and Policy Development Processes (PDPs) ICANN Learn
Software Development Life Cycle (SDLC) LinkedIn Learning
Online Professional and Academic Learning Course Global UGRAD

EDUCATION

Institute of Engineering (IOE), Thapathali Campus, Kathmandu, Nepal **78.47%**
Bachelor of Engineering (B.E.), Computer Engineering

- Studied Data Structure and Algorithm, Artificial Intelligence, Theory of Computation, Discrete Structure, Microprocessor System, System and Architecture, Compiler Design, **Academic Excellence Award** (Top 5% Rank in Class)

North Central College, Naperville, IL, USA *GPA: 3.925*
Global Undergraduate Exchange Program (Global UGRAD) — Fulbright Grantee Jan 2024–May 2024

- **Dean's List of Scholars**, Spring 2024 Semester. Coursework: Object-Oriented Software Development, Engineering Calculations, Digital Analog Signals, Quantum Physics, and Radio Practicum.
- On-air experience as Radio Jock and Newscaster at **WONC FM (89.1), Naperville**.

PROJECTS

– Utilizing Liquid Neural Network for Efficient Audio Classification - Benchmarking - 97.45% Resource Efficient with 89.15% Accuracy, 1DCNN-89% (State of the Art)
– Classifying Images/PDFs using Computer Vision Techniques
– Replicated popular research papers on **CNN** including **LeNet**, **AlexNet**, and **ResNet** for image classification on **CIFAR** dataset
– Built **3D** printed Assistive Technologies to support Child Education - ADB Makeathon
– Education Management Information System for Educational Institutions
– Build your Own **All-Sky Camera** Using Raspberry Pi; capture mesmerizing time-lapse images of the heavens
– Dev131 Bot - Utilizing Jetson Robot for Efficient License Plate Recognition with Autonomous Driving
– Building your own Programming Language using **C++**
– Hospital Information Management System to analyze use of computer for storing hospital's data
– A Webapp which will serve as motivating the user to garden the indoor plants

LEADERSHIP AND AWARDS

Asia Pacific Regional Internet Conference on Operational Technologies (APRICOT) Fellowship 2025

- One of the 28 fellows from Asia Pacific Region, Participated for APRICOT Conference, and Masterclass

Microsoft Azure Community Hero Badge **RARE:550**

- Community Heroes have contributed materially by organizing meetups, conferences, by sharing content or contributing to forums, and being an active members of the community, **Workshop-o-matic Host**

Completed **60 Days of #LearningWithLeapfrog** initiated by Leapfrog Technology
Third Placed on **Web Application on Security- Quiz** organized by **Digital Networks Nepal**
GOLD HONOUR on Budhanilkantha Physics Olympiad 2020
Best Poster: **"Instrument Handling & Minimizing Chemical Hazards in Chemistry Laboratories**

TALKS

Navigating the Security Minefield in Drupal: Identifying and Mitigating Risks Pentester's Nepal
Dev131- Utilizing Jetson Robot for Efficient License Plate Recognition & Autonomous Driving RALL Symposium
All-Sky Camera Using Raspberry Pi; capture mesmerizing time-lapse images of the heavens ACCA Symposium 2024

CONFERENCE & DIALOGUE DELEGATE

Promoting and Digital rights and Internet governance, Free and Open Internet — National SIG 2024
Empowering Youths for an Open, Inclusive, and Secure Internet — Youth IGF Nepal 2024
Discussed Internet governance, ICANN policies, and participated in Multistakeholder Model — APIGA Nepal 2024
Advocated for Youth in Digital & Sustainable Development in Inter generational Dialogue — Aug 13, 2024

VOLUNTEER EXPERIENCES

RIPE Atlas Ambassador — Sep 2025 - Present
- Promoted global Internet measurement by conducting technical workshops, onboarding new users, and hosting a **RIPE Atlas Probe (ID: 65903)** to enhance network diagnostics and transparency.

Rotaract Club of Kantipur — Dec 2022 - Present
- Equity Co-chair (RY 2024-25), Professional Development Director (RY 2023-24)

ECAST - Electronics and Computer Community Amidst Students — **Consultant**
- Overlook program events and management, assist in planning , coordination fo inclusive diverse community

Microsoft Learn Student Ambassador — **Gold Ambassador**
- Build community, Make a difference, Lead others, Learn and share, Peer Mentorship Mentor

ADB Hackathon for Sanitation Workers 2023 — April 27-29 2023
- Event Management Team for ADB Hackathon to empower Safety and Dignity of Sanitation Workers

Vertex Hacks - Chapter Alpha, Organizer — Sep 2022– Present
- Organizing the 36-hour hackathon to the students to promote learning by doing culture: inclusive, diverse