









Om Prakash Sharma

 Kathmandu, Nepal  om@acaiberry.io  +977-9861398098
 omprakashsharma.com.np  ompiepy  ompiepy  ompiepy  ompie.py

EDUCATION

Institute of Engineering (IOE), Thapathali Campus, Kathmandu, Nepal <i>Bachelor of Engineering (B.E.), Computer Engineering [8th Semester]</i> – Studied Data Structure and Algorithm, Artificial Intelligence, Theory of Computation, Discrete Structure, Microprocessor System, System and Architecture, Compiler Design – Academic Excellence Award: 2nd, 3rd, 4th and 5th Semester (Top 5% Rank in Class)	Average: 78.29% Apr 2021–Present
St. Xavier's College, Maitighar, Kathmandu, Nepal <i>SLC, Science</i>	GPA: 3.66 Jul 2017– Aug 2019
Gyanodaya Secondary School, Kathmandu, Nepal <i>SEE</i>	GPA: 3.85 2017

CULTURAL AND EDUCATIONAL EXCHANGE

North Central College, Naperville, IL, USA <i>Global Undergraduate Exchange Program (Global UGRAD) Fulbright Grantee</i> – One of the 319 worldwide exchange student selected by The United States of America, Department of States, Bureau of Cultural and Educational Exchange, Cultural Ambassador and Representative of Nepal – helping foster mutual understanding between the two countries during the semester exchange – Awarded Dean's list of Scholars for Spring 2024 Semester – Studied Object Oriented Software Development, Engineering Calculations, Digital and Analog Signals, Quantum Physics and Radio Practicum – Radio Jock, Newscast at WONC FM(89.1), Naperville	GPA: 3.925 Jan 2024–May 2024
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PROFESSIONAL EXPERIENCES

AI Engineer @ acAlberry.io – Building AI Solutions for Education – Designing and optimizing AI inference pipelines for real-time deployment, ensuring efficient model performance and scalability	Oct 2024–Present
Google Summer of Code 2024 Participant with Drupal Association – Contributed for Drupal GenAI Orchestration Platform for Drupal 10 in ECA Module	May 2024–Nov 2024
TCIOE-EMIS Web Development Team <i>Product Manager / DevOps Engineer</i> – Responsible for overall project coordination, scheduling, and communication. – Manages deployment, infrastructure, and automation processes for College Website	Jan 2023–Dec 2024
Karkhana <i>STEAM for School Mentor</i> – To facilitate the STEAM for School and ICT for School for program – To overlook the STEAM Club formed in the schools and guide the students of the club	Sep 2022–Dec 2022
<i>STEAM Sikai Chautari Mentor</i> – Mentor the students to work out for the solutions for the given problem prompt	Nov 2022
Nepal Cloud Professionals – Manage Microsoft 365 Admin Center, Microsoft Entra ID, Microsoft Defender, Microsoft Purview Compliance, Exchange Admin Center	Sep 2022–Present

RESEARCH EXPERIENCE

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 (ANAI 2024) NAAMI

- Supported instructors in course delivery, assisted students with assignments and projects, organized interactive sessions, and provided academic guidance to enhance the learning experience.

AI Apprenticeship in governance, diplomacy, and international relations Diplo

- Designed and refined AI prompts and datasets, enhancing the accuracy and relevance of AI-driven solutions for diplomacy and governance.
- Collaborated with experts to develop and promote AI tools, addressing challenges like AI hallucinations and ensuring quality outputs.

PROJECTS

Utilizing Liquid Neural Network for Efficient Audio Classification

Education Management Information System for Educational Institutions

All Sky Camera - 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

SKILLS

Languages: HTML, CSS, PHP, JavaScript, C, Python, C++

Tools: Git, Arduino, Docker

Library/Frameworks: WordPress, SaaS, Bootstrap, jQuery

Databases: MySQL, Cloud Databases

Platforms: Linux, Microsoft Azure, Google Cloud

LICENSES AND CERTIFICATIONS

Microsoft Certified: Azure Fundamentals (AZ-900)

Microsoft

APNIC Certified IPv6 Associate

APNIC Academy

Introduction to ICANN, Brief History and Policy Development Processes (PDPs)

ICANN Learn

Network Management & Monitoring, Policy Development Process

APNIC Academy

IPv6 Fundamentals

APNIC Academy

Software Development Life Cycle (SDLC)

LinkedIn Learning

Using AWS ML for Image Analysis

Genese Solution

Online Professional and Academic Learning Course

Global UGRAD

GitHub Fundamentals

GitHub

LEADERSHIP AND AWARDS

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

HARDWARE FELLOWSHIP Organized by LOCUS, Pulchowk Campus

Competitive Programming Workshop Certificate of Appreciation, ECAST, Thapathali

7 Days Digital Marketing and Data Science Certificate of Participation, Sunway College, Kathmandu

Second Placed on **Artificial Intelligence and Machine Learning- Quiz** organized by **DigiVersity**

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**

Semi-Finalist in **3rd Inter-School ICT Quiz Contest** organized by **Brush -Up Online**

Third-Place in ICT Presentation Competition on "**Artificial Intelligence**"

TALKS

Navigating the Security Minefield in Drupal: Identifying and Mitigating Risks Pentester's Nepal

Dev131- Utilizing Jetson Robot for Efficient License Plate Recognition with Autonomous Driving RALL
Symposium 2024

Build your Own 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

Rotaract Club of Kantipur Dec 2022 - Present

– Equity Co-chair RY 2024-25

– Professional Development Director RY 2023-24

– Graphics Designer RY 2022-23

ECAST - Electronics and Computer Community Amidst Students **Consultant**

– Overlook program events and management, assist in planning and coordination, make community inclusive and diverse

Microsoft Learn Student Ambassador **Gold Ambassador**

– Build community, Make a difference, Lead others, Learn and share, Peer Mentorship Mentor, Social Impact Project Team Lead, Imagine Cup Junior Mentoring

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

Deer Hacks 2023 - Mentor 5th-7th May 2023

– provide guidance and support to the participating teams throughout the hackathon.

AngelHack Student Ambassador Aug 2022– Present

– Host **hackathons** on disruptive challenges, exciting technologies and new opportunities.

CppCon 2022, C++ on Sea 2022, CppIndiaCon 2022, CppCon 2021 Volunteer

National Population Census 2021 Census Enumerator

Asteroid Search Campaign NASO, Nepal

Volunteer Teacher Gyanodaya Secondary School, Kathmandu

Presentation on "Astronomy and Space Science for Physics Day-2018"

SUSTAINABILITY

CNF1019651, Orchid Tree Planted in the Microsoft Azure Developer Community Forest. Contribution towards reducing carbon footprint and overall global Sustainability Development Goals.