Snigdh Karki

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EDUCATION

Bachelors in Computer Engineering 2023 – present
Pulchowk Engineering Campus Kathmandu, Nepal

High School 2021 – 2023
Capital College and Research Centre Kathmandu, Nepal
GPA: 3.87 + 3.85

Secondary Education Examination (SEE) 2020
Aksharaa School Kathmandu, Nepal
GPA: 4.0

SPECIALIZED PROGRAMS & FELLOWSHIPS

AWS Certified Solutions Architect Associate 01/2026 – 03/2026
Amazon

Samsung Innovation Campus - C&P 12/2024 – 04/2025
Samsung Electronics

Data Fellowship 2024 01/2024 – 01/2025
Sunway College - Datacamp donates

Asia Pacific Internet Engineering Program 01/2025 – 04/2025
SOI-Asia Project

PROJECTS

Applied AI in Real-World Systems
- AI powered data migration app for government use (gemini api, streamlit-aggrid)
- Compilance Gap Detector and Policy Analyzer (local ollama, RAG, tesseract)
- Real-time sign language detector (mediapipe, opencv, tensorflow)
- Music Charts error detector from Audio (from scratch using music21)

Open Source Contribution
- RISP GUI Simulator (React, C++, Docker)

Reinforcement Learning
- Taxi Path (using Bellman equation from scratch)
- Flappy Bird (using NEAT algorithm)
- Walking Robot (using Perceptron)

Image, Time Series, and Data Prediction Models
- Flower image classifier (using CONVNET)
- Ecuador store sales prediction (processing Time series data)
- Boston housing price prediction (XGboost and Random Forest with feature engineering)

FPGA hardware
- NPPU (Nand Parallel Processing Unit)

AWARDS

TU-IOE, Entrance position 6th 06/2023
Tribhuwan University

Sagarmatha HackFest Winner 01/2024
Sunway College

SecurityPal Hackathon Second Place Winner 05/2025
Nepal Hacks 3.0 National Hackathon

IEEEXtreme 18.0, National top 10 02/2025
IEEE

Pulchowk Integration Bee position 2nd 07/2023
MAPS, IOE pulchowk

WORK EXPERIENCE

AI/Data Intern 04/2026 – 07/2026
UBA-solutions

Data Engineer 03/2026 – 04/2026
Ramlaxman Group

Web Developer for Mimosa Intl. Consultancy 03/2023
Designed and Built the Official Website for Mimosa Intl.

Python bootcamp Head mentor 01/2025
For 1st and 2nd year Pulchowk undergrads

C bootcamp Head mentor 02/2025
For 1st year Pulchowk undergrads

Club leads 06/2025
IEEE CS club R&D head, IT club executive

CCRC Lecturer 01/2026 – 03/2026
IOE preparation

PI Academy Lecturer 06/2025 – 08/2025
IOE preparation

Pariksha Acedamy Lecturer 06/2025 – 08/2025
BSc CSIT preparation

PUBLICATIONS

Research paper on Reinforcement Learning 03/2024
The Zerone Scholar

A Comparative Review of Single-Bit Parallel Architectures 07/2026
Journal of IEEE CS Pulchowk

Theory of computation - Full YouTube Course Playlist 10/2024
Problem-solving tutorial

Visualizing thermodynamic table - Medium blog 04/2024
Graph visualization and explanation

COURSES

DataCamp
Statistics and Datahandling

Kaggle
AI and ML

Coursera
Python and Git

SKILLS

Languages
Python, SQL, R, C, C++, Javascript, Lisp, Verilog

Frameworks
Numpy, Pandas, Scipy, Matplotlib, Seaborn, Scikit Learn, Tensorflow, NEAT, React, Node

Developer Tools
Git, Vscode, Linux

REFERENCES

Nishchal Acharya, *Assistant Professor, Coordinator,* Pulchowk Engineering Campus
nishchal4feb@pcampus.edu.np, facebook.com/nishchal.nepali

Rajendra Pokhrel, *Coordinator,* CCRC
rajendrapokhral@gmail.com, facebook.com/Rajbinit