ROHAN SIMKHADA

Jorparti, Kathmandu + 977 9869375874 simkhadarohan82@gmail.com

OBJECTIVES:

A recent Electrical Engineering graduate with a strong inclination toward interdisciplinary learning and problem solving. Comfortable working across technical domains, with interests ranging from coding and system design to research, writing, and sustainable technologies. Driven by curiosity and a desire to explore complex ideas, with a focus on applying knowledge in thoughtful, adaptable ways within diverse professional settings. I consider myself an evolving learner with eagerness to prove myself.

EDUCATION:

Pulchowk Campus:
Lalitpur
Bachelor Electrical Engineering 2021 - 2025

Trinity International College:
Kathmandu
+2
GPA: 3.65

PROJECTS:

- SOFTWARE PROJECTS:
  - ✓ **Next-word-guessing-using-ngram** *Python*

https://github.com/Rohan0075/next-word-guesssing-using-ngram

Developed an N-gram language model for next-word prediction using TensorFlow and NumPy

Gained experience in basic machine learning algorithm

- ✓ **Ping pong game using python** *Python*

https://github.com/Rohan0075/ping-pong-game-python

Built an interactive Ping Pong game with GUI using Tkinter library

Strengthened understanding of event-driven programming and OOP concepts

- ✓ **Dice Game using react** *React*

https://github.com/Rohan0075/dicegamereact/

Built an interactive dice game using React hooks (useState) to manage game state dynamically.

Focused on core React concepts like component rendering and event handling.

- ✓ **Tic Tac toe using react** *React*

https://github.com/Rohan0075/tictactoe-react

Developed a classic Tic-Tac-Toe game leveraging React hooks (useState, props) for turn management and win-condition logic.

Strengthened understanding of React's component-based architecture.

- MAJOR PROJECT COLLEGE:

ONBOARD CHARGER DESIGN AND MATLAB SIMULATION USING TOTEM POLE PFC CIRCUIT AND DUAL ACTIVE BRIDGE CONVERTER:

Onboard chargers are used in EV so we designed an efficient on board charging system and simulated the system in MATLAB Simulink to verify our designs.

Skills: Power electronics, circuit analysis, sustainable tech

TECHNICAL SKILLS:

- **Design**: Transmission, Machines, PCB, Electrical System Design, AutoCAD drafting, Domestic electrification design, and load distribution, Transformer Design
- **Electrical Systems**: Circuit Analysis, Motor Drives, Power Electronics
- **Design and Simulation Tools**: AutoCAD, MATLAB, Proteus
- **Programming/Coding**: Python, C, C++, JavaScript
- **MS Office Suite:** Word, Excel, PowerPoint

INTERESTS:

- **Watching films through humanist and multicultural lenses** – cultivates empathy, global awareness, and critical thinking
- **Studying chess as a tool for mental discipline and tactical reasoning** – strengthens logical structure and resilience
- **Engaging with philosophical ideas across cultures** – develops nuanced worldviews and argumentation skills

ONLINE CERTFICATES AND SELF LEARNING:

- **Data Analysis with Python| CognitiveClass | (May 2025) | Credential:** https://courses.cognitiveclass.ai/certificates/7d015ec3910144618b991de27585f3da
- **Python 101 for Data Science | CognitiveClass | (May 2025) | Credential:** https://courses.cognitiveclass.ai/certificates/eadfedea929942a5a29b77e3d7f801dc
- **Introduction to Psychology | Yale University (May 2022) | Credential:** https://www.coursera.org/account/accomplishments/verify/HDHD8RZWV53S
- **Game-Theoretic Solution Concepts| Coursera (Dec 2021) | Credential:** https://www.coursera.org/account/accomplishments/verify/U5SFEBXUAVCG