# Sarshij Karn AI-Powered Engineering Enthusiast

arshijkarn.com.np in linkedin.com/in/sarshij-karn github.com/SarshijKarn

#### **PROFILE**

Insightful and dedicated engineering student passionate about applying technology to address real-world challenges. Proficient in electronics, programming and fluent in AI tools and up-to-date with emerging technology trends.

#### **EDUCATION**

Bachelor's in Electronics, Communication and Information Engineering,

National College Of Engineering (T.U)

**Grade – XII (NEB),** Liverpool International College

GPA: 3.53

Grade - X (NEB), Happyland Secondary School

GPA: 4.00

2024 – Present | Lalitpur, Nepal

2022 - 2024 | Kathmandu, Nepal

08/2021 | Saptari, Nepal

## **SKILLS**

### • TECHNICAL SKILLS:

Languages: C, C++, Python

Web Development: HTML5, CSS3, JS, Git, GitHub Electronics & Embedded Systems: Arduino, Circuit Simulation, Signal and Systems

Prompt Engineering: GPT-based prompt design,

task automation, role-based agents

AI & Automation Tools: OpenAI API, n8n, Zapier

and more

*Cybersecurity & Terminal:* Linux scripting, ethical hacking (learning stage)

**Tools & IDEs**: VS Code, Arduino IDE, Google Colab, Replit, Trae

**Cloud platforms:** (Netlify, Vercel, Cloudflare GitHub Pages)

**AI Fluency** – Proficient in integrating AI tools to optimize workflows, accelerate development, and solve problems creatively.

# • SOFT SKILLS:

*Creative Problem-Solving* – Turns real-world problems into projects

**Self-Learning** – Learns tools, tech, and concepts fast

*Cross-Domain Thinking* – Blends engineering, AI and finance

**Emotional Intelligence** – Balances logic, empathy, and humor

 $\textbf{Strong Communication} - \text{Explains complex ideas} \\ \text{in simple ways} \\$ 

**Growth Mindset** – Fails fast and learns faster **Focus & Consistency** – Builds with patience and discipline

**Collaboration** – Works well in teams, remote or hybrid

#### LANGUAGES

- English (Fluent)
- Nepali (Native)
- Hindi (Fluent)
- Maithili (Conversational)

#### **INTERESTS**

Technology & AI | Financial Markets (Stocks & Forex) | Web & Tech Exploration | Watching
Fiction, Biographies and Documentaries | Playing Sports | Creative Writing & Storytelling |
Reading Books | Hackathons and Workshops

# **PROJECTS**

#### **Emotion Detection Model @**

Developed a Python-based machine learning model using OpenCV and deep learning to detect human emotions from real-time facial expressions.

#### Personal Portfolio Website &

Designed and developed a fully responsive portfolio using HTML5, CSS3, and JavaScript to showcase skills, projects, and achievements.

## **Gesture Based Calculator With Speech Output** *⊘*

Developed a gesture-controlled calculator in python that performs arithmetic operations based on hand gestures tracked via webcam. It detects fingers to input numbers and thumb proximity to assign operators. Integrates speech feedback and full-screen real-time overlay interface.

#### Habibi Assistant ∂

Built an offline voice-activated AI assistant in Python capable of answering questions, telling jokes, reporting system stats, searching the web, and chatting via natural speech. Integrated SpeechRecognition and OpenAI API for smart responses and interactive dialogue.

## **AWARDS**

## Merit-Based Scholarship, Liverpool International College

Awarded for outstanding academic performance in Grades 11 and 12

#### Full Merit Scholarship, National College Of Engineering

Awarded for engineering studies after excelling in the engineering entrance exam on the first attempt

## **Certificate Of Participation**

Awarded for active participation in multiple hackathons and technical workshops on electronics, AI, cybersecurity, and software development, both within and outside college.

# **DECLARATION**

I hereby declare that the information provided above is true and accurate to the best of my knowledge and belief. I take full responsibility for its authenticity and am committed to upholding integrity in all academic and professional pursuits.

Sarshij Karn

Kathmandu, Nepal