

## SAMBHAV POUDEL

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[GitHub](#) | [LinkedIn](#) | [Devpost](#)

### EDUCATION

#### University of Cincinnati

Bachelor of Science, Computer Science

Cincinnati, OH

Expected Graduation: Aug 2028

- Related Coursework: Objects & Design, Computer Organization & Programming, Object-Oriented Programming, Statistics & Probability, Engineering & Design Thinking, Python, Computer Science (C++)

### SKILLS

**Programming:** C++, C, Python, SQL, JavaScript, HTML/CSS, Dart

**Frameworks/Tools:** Node.js, React, MongoDB, Git, TensorFlow, LabVIEW, MATLAB, VBA

**Other:** Microsoft Excel, Data Analysis, Machine Learning

### PROJECTS

#### StepOne | UC Berkeley AI Hackathon 2025 (JavaScript, Python, CSS, Git)

June 2025

- Developed a fully voice-driven interview system using WebSocket, OpenAI Whisper (STT), Groq (LLM), and TTS for real-time persona-based interactions
- Designed, deployed and coordinated a multi-agent AI architecture integrating GPT-4o, Claude, Groq, and Perplexity for end-to-end customer discovery automation
- Ensured type-safe data exchange using Pydantic and optimized asynchronous communication across APIs

#### Food Image Classification | Personal Project (Python, TensorFlow, Keras)

Jan 2025- Feb 2025

- Applied pre-trained models (EfficientNetB0 and ResNet50V2) on a 10-class Food-101 dataset from Kaggle to classify food images using transfer learning
- Achieved 86.36% test accuracy using only 10% of training data by freezing feature extraction layers and fine-tuning custom dense layers
- Used TensorBoard callbacks to track and compare training performance of different models; visualized metrics like loss and accuracy to evaluate model performance on small datasets

#### Shouternity | HackRice (Python, PyAudio, Pygame, Git)

Sep 2024

- Developed a voice-activated game using PyAudio and SpeechRecognition, where players control a dragon through audio input instead of keyboard/mouse
- Integrated Python's threading module to run audio detection in parallel with the game loop, ensuring smooth gameplay and real-time voice response
- Designed animated sprites, scrolling backgrounds, and random obstacle generation in Pygame, with real-time collision detection and customizable difficulty physics

### WORK EXPERIENCE

#### Naya Patrika Daily | Data Analysis Intern (Python, Python libraries, SQL)

Jan 2023 - Aug 2023

- Automated cleaning and formatting large tabular datasets using Pandas, improving report generation time by 30%
- Practiced exploratory data analysis (EDA) to understand patterns and summarize key metrics from structured data
- Created simple visualizations in Matplotlib and Seaborn to highlight trends and improve data presentation for team discussions

### LEADERSHIP & ACTIVITIES

#### RevolutionUC | Hackathon (Organizing Team-Logistics)

Nov 2024 - Mar 2025

- Assisted with 24-hour event logistics, including setup, registration, and coordinating supplies to ensure a smooth hackathon experience
- Suggested and helped organize fun side activities like games and mini challenges to keep students excited and involved during the event

#### Bearcat Buddies | Mentor (Volunteer)

Aug 2023 - Jan 2024

- Mentored 5 elementary school students, providing invaluable assistance with their classroom activities while fostering meaningful interactions
- Encouraged students' critical thinking and problem-solving skills by creating engaging learning activities tailored to their individual needs