

Roshan Sahani

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[github](#) | [linkedin](#) | [website](#)

EDUCATION

BE Computer Engineering

Kathmandu University (CGPA: 3.73/4.0 till 6th sem)

2021 - 2025 (expected)

Dhulikhel, Nepal

+2 NEB

Kathmandu Model College (CGPA: 3.47/4.0)

2018 - 2020

Bagbazar, Kathmandu

Secondary Education Examination (SEE)

New Life Higher Secondary Boarding School (GPA: 3.65/4.0)

2018

Galkot, Baglung

SKILLS

Programming Languages

Python, C++, C, JavaScript, MATLAB

Technologies

Docker, Kubernetes, Jenkins, Microsoft Azure, AWS, Google Cloud, Ansible, Terraform, Git, Linux, Node.js, MySQL, Neo4j, MongoDB, Shell Scripting, VS Code, ML, API

Soft Skills

Leadership, Communication, Time Management, Presentation, Organized, Creative, Problem-Solving, Teamwork, Adaptability, Analytical Thinking

EXPERIENCE

Portal Design and Development

2024 - present

UniCollab

- Led the design and development of UniCollab, a web portal connecting students with job opportunities, internships, and projects.
- Optimized UniCollab using WordPress, React.js, Node.js, and MongoDB achieving a 40% reduction in platform loading time and a 25% increase in user retention.
- Managed the deployment process, collaborating with hosting providers, configuring servers, and establishing deployment pipelines to ensure uninterrupted service and easy maintenance.

PROJECTS

- vNote:** Developed an AI-driven speech-to-text note-taking app for students, featuring collaborative functionalities to enhance study efficiency.
- EcoWatch:** Led the EcoWatch project, using machine learning algorithms to analyze CCTV footage for fire, accident and illegal dumping detection, significantly enhancing emergency response efficiency and situational awareness for first responders.
- RS8:** Engineered the RS8, an innovative 8-bit CPU architecture, featuring 16 custom instructions with 4-bit opcodes and optimized address lengths.
- Project Respire:** Developed Project Respire, an integrated system utilizing IoT, machine learning, blockchain technology, and mobile applications to monitor and provide real-time air quality information.
- KUvents:** A web application tailored for Kathmandu University to streamline event coordination and enhance engagement among students.
- Polpos-Paradise:** An innovative house numbering system that enhances location identification and improves the efficiency of address sharing.
- Portfolio:** Developed a dynamic personal portfolio website showcasing a diverse range of work and expertise, resulting in a 40% increase in professional networking connections.
- Temporary_File_Cleaner:** Developed Temporary_File_Cleaner, a batch script that removes PC temporary files, improving system speed by 20% and increasing disk space.
- Wi-Fi-AutoConfig-Manager:** A script for automating network settings configuration on Windows, reducing setup time and increasing operational efficiency.
- FNepse:** An automation system for extracting and processing data from the Nepal Stock Exchange, reducing manual data entry time by 80%.
- SVD Image Watermarking:** Developed an advanced SVD Image Watermarking system using Python and OpenCV, enhancing image security and quality by 40%.
- ArtiFynance:** A machine learning project using LSTM models to predict stock prices in the Nepal Stock Market.
- MicroWizards:** Implemented a feature in Assembly Language to add two 16-bit numbers with carry.

- **DNS-SERVER:** Successfully configured a DNS server on Kali Linux using BIND9, enhancing network management and resolution capabilities.
- **Web-Development-Projects:** Actively participated in Hacktoberfest by contributing to a variety of web development projects at Prodigy InfoTech, including an Air Pollution Tracker, Clock Web App, and Love Calculator, focusing on innovative solutions.
- **nepse-data:** Enriched the dataset with historical data for the Nepal Stock Market to improve analysis and forecasting capabilities.
- **SCRIBE:** Developed an open-source platform especially designed for content creators, integrating blockchain technology to ensure transparency and security in content management and monetization.
- **Hashtag:** A social networking site designed for dynamic content sharing, where users interact and discover posts based on specific tags, enhancing community connection and content discoverability.
- **El Mars:** An exploration game that simulates the real environment and physics of Mars using Unity.

HONORS & AWARDS

- **Winner, Ecothon 2023**
Achieved first place at the nation's inaugural environmental hackathon, leading the EcoWatch project, which focused on innovative environmental solutions.
- **Cloud Community Coordinator 2024, KUCC**
Appointed as Cloud Community Coordinator for Kathmandu University Computer Club, responsible for facilitating cloud-related activities.
- **Nepal Cybersecurity Scholarship Recipient**
Awarded by EC-Council in recognition of dedication and achievements in advancing skills in cybersecurity and cloud computing.
- **Hall of Fame, Hacktoberfest 2023**
Honored in the Hacktoberfest 2023 Hall of Fame for significant contributions to open source projects.
- **Postman Student Leader**
Recognized as the second Postman Student Leader in the nation, awarded by Postman for outstanding contributions to community-building and technological advancement.
- **Cloud Computing Track Winner, KU Hackfest 2023**
Won the Cloud Computing Track at KU Hackfest 2023 with the innovative project Respire.
- **Microsoft Learn Student Ambassador**
Acknowledged as a Microsoft Learn Student Ambassador for significant contributions to student learning and technology advocacy.
- **Winner, AR Treasure Hunt 2022**
Secured victory in the AR Treasure Hunt at IT MEET 2022.
- **Open Innovation Track Winner, KU Hackfest 2022**
Secured the victory in the Open Innovation Track at KU Hackfest 2022 with my project, SCRIBE.
- **New Life Star 2018**
Awarded for exceptional academic achievement and leadership at New Life Higher Secondary Boarding School.

CLUBS AND COMMUNITIES

Cloud Community Coordinator	<i>Kathmandu University Computer Club</i>	<i>2024 - present</i>
Executive Member	<i>Kathmandu University Computer Club</i>	<i>2023 - 2024</i>
Cofounder - Media Club	<i>Kathmandu Model College</i>	<i>2019 - 2020</i>
Vice School Captain	<i>New Life Higher Secondary School</i>	<i>2017 - 2018</i>

LANGUAGES

- **Nepali** [Native]
- **English** [Fluent]
- **Hindi** [Fluent]