

# SUMESH SHRESTHA

## Computer Engineering Student

Shreekhandaipur, Dhulikhel | +977 9861893989 | [sumeshstha94@gmail.com](mailto:sumeshstha94@gmail.com) | <https://github.com/Sumeshstha> | <https://sumeshshrestha.com.np>

---

## SUMMARY

Motivated and detail-oriented Computer Engineering student seeking a challenging internship position to apply software development and problem-solving skills to real-world projects. Proficient in multiple programming languages and tools, with hands-on experience in web/mobile development, machine learning, and systems programming.

## EDUCATION

### High School (+2 Science)

2019 - 2021

Khwopa Secondary School (KSS)

Dekocha, Bhaktapur

### Bachelor in Computer Engineering

Feb 2022 - Present

Kathmandu University, Dhulikhel

- **Relevant Coursework:** Programming Fundamentals, Embedded Systems, Data Structures and Algorithms, Database Management Systems, Operating Systems, Computer Architecture, Compiler Design, Artificial Intelligence, Data Mining, Communication and Networking, Speech and Language Processing, Software Engineering.

## ACADEMIC-PROJECTS

### Social Mind

- Developed a full-featured social media app using Flutter for a cross-platform interface and Firebase for the backend.
- Implemented user authentication with Firebase Auth, allowing users to sign up, log in, and manage sessions securely.
- Used Firebase Cloud Storage to support media uploads and optimized them for smooth display in the app.

### Pneumonia Detection System

- Developed a deep learning-based medical imaging system for pneumonia detection using chest X-ray images, featuring a React frontend for image upload and result display, and a Django backend for inference processing and database integration.
- Trained a Convolutional Neural Network (CNN) using TensorFlow and Keras to achieve a high classification accuracy of 94 % and 0. 19 loss on the test set.

### Kalimati Market Monitor

- Developed a Streamlit-based dashboard to visualize and analyze fruit and vegetable price data from the Kalimati Market in Nepal.
- Applied data mining and preprocessing techniques to collect, clean, and aggregate daily market data for trend and price modeling.
- Designed an interactive interface featuring charts, forecasts, and a map layout for clear insights into market trends and spatial context.

### Recipe Website

- Developed and deployed a full-stack web application using the MERN stack, implementing RESTful APIs and secure user authentication with JWT.
- Designed and integrated responsive front-end components with React and managed state efficiently using hooks and Axios interceptors, ensuring smooth client-server communication.
- Improved scalability by optimizing MongoDB queries and handling token refresh logic.

## SKILLS

**Programming Languages:** Python, C, C++, JavaScript, Dart

**Frameworks:** React JS, ExpressJS, Flutter, Firebase, Tensorflow

**Databases:** PostgreSQL, MongoDB

**Tools:** Git/GitHub, REST APIs, Full-Stack Development, Debugging & Testing, Object-Oriented Programming

**Other:** Analytical Thinking, Communication and Teamwork, Time Management, Adaptability