

SUMESH SHRESTHA

Computer Engineering Student

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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

Friendly Chat

- 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
