# Ayush Rana

#### Dehradun, Uttarakhand

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# **EDUCATION**

Graphic Era Hill University- Dehradun, India

Bachelor of Technology, Computer Science Engineering

06/2021 - 07/2025

CGPA: 8.1/10

D.S.B International Public School, Rishikesh

Senior Secondary Education C.B.S.E

04/2019 - 05/202194.8%

D.S.B International Public School, Rishikesh

Secondary Education C.B.S.E

04/2019

95%

## **PROJECTS**

Advanced Graph Algorithms Library in C++ | Graphs, 12/2023 - 01/2024 VS code | github link [Link]

- The Advanced Graph Algorithms Library includes shortest path algorithms (Dijkstra, Bellman-Ford, Floyd-Warshall), graph search methods (DFS, BFS), distance calculations, topological sorting, and minimum spanning trees.
- Designed for efficiency, it supports adjacency matrix and list representations, with power Object Oriented Programming.

#### Handwritten Digit Recognition | Neural Networks, 01/2024 - 01/2024

Python, Jupyter Notebook [Link]

- The Handwritten Digit Recognition project, developed in a Jupyter Notebook, leveraging Pandas for data handling and TensorFlow with Keras for building and training the neural network, the project showcases a robust approach to image classification.
- It includes steps for data preprocessing, model architecture design, training, and evaluation. Achieving classification accuracies of 97.65%.

Expense Tracker | Web Application | Vue.js, 01/2024 - 02/2024

Vue, HTML, CSS, Javascript [Link]

- The Expense Tracker Website is a application built with Vue.js, HTML, CSS, and JavaScript. It features a user-friendly interface for adding, editing, and deleting expenses, along with real-time budget tracking and analytics.
- Users can categorize expenses, visualize spending patterns through charts, and set budget limits to gain better financial control. The application is designed for optimal performance, ensuring a smooth user experience.

## Chat With PDFs | LLM, Streamlit, Langehain, Vectorstore, 06/2024 - 06/2024

Python, [Link]

- Developed a robust chat application capable of interacting with multiple PDFs simultaneously. The application leverages large language models (LLMs) for natural language understanding and processing...
- It runs seamlessly on local machines without requiring external API calls, ensuring data privacy and security. Utilizes word embeddings and a vectorstore to efficiently search and helps Time Management with PDFs.

#### Automated To-Do List App | CI/Cd pipeline, 04/2024 - 04/2024

Amazon EC2, Docker [Link]

- The To-Do List App is developed using the Django framework and deployed on a remote AWS EC2 instance. This project employs automation tools like Jenkins for CI/CD, Docker for containerization, Kubernetes for orchestration, and Ansible for configuration management
- It provides users with an intuitive interface to manage tasks efficiently, featuring managing to-do items and also showcase of modern DevOps practices and Team collaboration.

## TECHNICAL SKILLS

**Programming Languages:** Python, C, C++, Java.

Web Development:: HTML, CSS, Javascript, Django, Vue.js, Streamlit, Git, Docker.

Other Skill: Jenkins, Object Oriented programming, MySQL, Machine Learning, Time Management, Quick learner, Problem solving, Data Structures and Algorithms, Solution Oriented, Service Now

### ACADEMIC AND EXTRACURRICULAR ACHIEVEMENTS

- LeetCode contest rating 1465 & solved 400+ DSA question on Leetcode
- All india rank 144 in UPSC NDA examination

#### CERTIFICATES

Service Now: Certified Application Developer User Interface Creator | May 2024

[Link]

AI Tools Workshop | November 2023

[Link]