

AYUSH PATIL

☎ +91-9969619447 ✉ ayushpatil.patil10@gmail.com 🔗 [linkedin.com/in/ayush-patil](https://www.linkedin.com/in/ayush-patil) 🐙 github.com/Ayush1390

Education

Pimpri Chinchwad College of Engineering, Pune

November 2022 - June 2026

Bachelor of Technology in Computer Science

CGPA - 7.34

Relevant Coursework

- Data Structures
- Algorithms Analysis
- Object Oriented Programming
- Software Methodology
- Database Management
- Computer Networking

Projects

Plant Disease Detection

- Developed a deep learning-based **Flask web application** for **plant disease classification**, integrating a trained model for real-time image-based predictions.
- Utilized **transfer learning with ResNet-18**, achieving **95.8% test accuracy**, significantly outperforming the custom model.
- Preprocessed and augmented image data using **torchvision.transforms**, improving model generalization.
- Trained and evaluated models using **PyTorch**, employing Adam optimizer, cross-entropy loss, and visualization techniques for performance comparison.

I-QAgen

- Developed a **web application** that processes uploaded PDFs and automatically generates interview questions and answers using **large language models**.
- Implemented **text extraction** and **chunking** techniques to transform large PDFs into manageable pieces of content for efficient question creation.
- Integrated a **vector database** to store document chunks and enable precise retrieval of answers, improving the relevance and efficiency of the generated Question and Answers.
- The generated interview questions and answers are **stored in a CSV file**, enabling users to download and review the content easily.

Customer Segmentation

- Implemented customer segmentation using **k-means clustering** to group customers based on purchase behavior and demographics, providing insights into different customer profiles.
- Cleaned and preprocessed data using **pandas, numPy** to handle missing values, normalize features, and prepare the dataset for analysis.
- Visualized the segmented data using tools like **matplotlib and seaborn** to better understand customer patterns and distribution.

Technical Skills

Programming Languages: C++, C, Python, SQL

Web Development: HTML, CSS, JavaScript, React.js, Node.js, Express.js

Databases: MySQL, MongoDB

Artificial Intelligence and Machine Learning: Supervised Learning, Unsupervised Learning, Deep Learning, PyTorch, Scikit-Learn, Hugging Face, LangChain

Computer Vision: Image Classification, Convolutional Neural Networks (CNNs), Transfer Learning, Deep Learning with PyTorch

Data Science and Analytics: Pandas, NumPy, Matplotlib, Seaborn, Power BI

Development Tools and Platforms: Git, GitHub, VS Code, Jupyter Notebook, Google Colab

Coding Platform Profiles

GeeksforGeeks Codeforces Codechef Leetcode

Achievements

- Attained a 2-star rating on Codechef with a maximum rating of 1423.
- Achieved a global rank of 492/15000+ in Codechef Starters 115.
- Achieved 2nd price in webWizard Arena competition organized by ACM-W.
- Solved 400+ questions based on Data Structures and Algorithms on various Coding Platforms.

Position of responsibility

PCCOE ACM Students Chapter

August 2023 - April 2024

Junior Webmaster (web team member)