

Ayush Bhut

Pre-Final Year | Computer Science & Engineering | IIT Jodhpur
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EDUCATION

IIT JODHPUR

B.TECH. IN COMPUTER SCIENCE & ENGINEERING

2021-2025 | Jodhpur, India
CGPA : 7.29/10 (till 5th Sem)

VIDYADHISH VIDYASANKUL CLASS 12TH, GUJARAT BOARD

March 2021 | Bhavnagar, India
Marks : 462 / 500
Percentage : 92.4%

SAINT MARY'S HIGH SCHOOL CLASS 10TH, GUJARAT BOARD

March 2019 | Bhavnagar, India
Marks : 554 / 600
Percentage : 92.33%

LINKS

Github:// [Ayush0802](#)
LinkedIn:// [ayushbhut](#)
LeetCode:// [ayushbhut007](#)

COURSEWORK

UNDERGRADUATE

Introduction to Computer Science
Data Structure And Algorithms
Pattern Recognition And Machine Learning
Software Engineering
Maths For Computing
Operating System
Design And Analysis of Algorithms
Database Management System

SKILLS

PROGRAMMING

• C • C++ • Python • HTML
• CSS • Javascript
Familiar with:
• MySQL • Verilog

MACHINE LEARNING

• Scikit-Learn • Scipy
• Numpy • Pandas

OTHER SKILLS

• Arduino Coding
• Problem Solving
Familiar with:
• Android Studio

PROJECTS

FEDERATED LEARNING FOR HISTOPATHOLOGY IMAGES

Sep 2023 - Dec 2023 | Python, Pytorch, Scikit-Learn, Grad-CAM

- Worked on Federated learning techniques which allows a model to be trained across multiple decentralized devices or servers holding local data samples, without exchanging them and maintaining privacy.
- Our proposed algorithm enhances the accuracy of the medical image analysis and also beats the results of the existing algorithms in federated learning such as FedAvg, FedOpt and FedProx.

PROCESS MONITORING SYSTEM | OPERATING SYSTEM

Nov 2023 | Python, Linux, Ubuntu

- Designed a task manager for Ubuntu which will check Process State, Process Attributes like time taken by the CPU, priority of the process, CPU consumption, memory consumption, PID, etc.
- Also created a GUI to show all the above information.

MOVIE RECOMMENDATION SYSTEM | PRML COURSE PROJECT

March 2023 - April 2023 | Python, Numpy, Pandas, Scikit-Learn, NLP

- Used Kaggle dataset of Movies with their genre, rating, tags and views to train my Machine Learning Model.
- First model was made on the basis of genre and tags of the movies.
- Second model was made on the basis of KNN clustering.
- Third model was made on the basis of Collaborative Filtering (User Similarity).

YOUTUBE COMMENT CLASSIFICATION | PRML COURSE PROJECT

March 2023 | Python, Pandas, Scikit-Learn

- Created a ML model to identify Spam and Ham Comments.
- Used Kaggle dataset of Youtube Comments to train my ML model.
- In this I used different Clustering Algorithms such as K-Means, DBSCAN, Spectral and Agglomerative.

FACE DETECTION ATTENDANCE SYSTEM | SOFTWARE DEVELOPMENT

Feb 2023 - April 2023 | Python, MySQL, ML, Tkinter

- Created a Desktop Application for taking the Attendance of College Students using face detection which has features to record or show Attendance, enter Student data along with their Photo Samples, save Attendance of each student.
- Used LBPH Algorithm for face detection along with OpenCV in this Project.

TIC-TAC-TOE GAME | SOFTWARE PROJECT

Jan 2023 | HTML, CSS, Javascript, Python, C++

- Created a responsive Tic-Tac-Toe game using HTML, CSS, Javascript.
- Created a User Interactive Tic-Tac-Toe game in Python using Tkinter library.
- Also Made a simple Tic-Tac-Toe game using C++.

OTHERS

- I also do Competitive Programming over different Platforms such as LeetCode and CodeForces.
- Appointed as **Head - Accommodation & Transportation Team** (2024), last year appointed as **Assistant Head - Event Management Team** (2023) of IIT Jodhpur's Annual Cultural Fest **IGNUS**.
- In JEE ADVANCED 2021 I Qualified in Top 1% among 1 million JEE aspirants.
- I also stood 1st in school in IMO (International Maths Olympiad) in Std 10th.