Ayush Bhut

Pre-Final Year | Computer Science & Engineering | IIT Jodhpur
Portfolio | bhut.1@iitj.ac.in | +91 9426278580

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**

COURSEWORK

UNDERGRADUATE
Data Structure And Algorithms
Pattern Recognition And Machine Learning
Software Engineering
Operaring System
Design And Analysis of Algorithms
Database Management System
Computer Vision
Cryptography
Cyber Security

SKILLS

PROGRAMMING
• C • C++ • Python • HTML
• CSS • Javascript • NodeJS
• ExpressJS • MongoDB • MySQL
• Verilog

MACHINE LEARNING
• Scikit-Learn • Scipy • Numpy
• Pandas • PyTorch • NLP

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

PROJECTS

PANORAMIC PHOTO STITCHING | Computer Vision
March 2024 - April 2023 | OpenCV, Python, Numpy
- Developed a panoramic photo stitching technique which can be used to stitch and blend multiple images together to generate a panorama of the images.
- Implemented algorithms for image alignment, feature detection, blending, etc to seamlessly merge multiple photographs into a single panoramic image.

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.

MOVIE RECOMMENDATION SYSTEM | PRML 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 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 Competititve Programming over different Platforms such as LeetCode and CodeForces.
- Appointed as **Assistant Head - Event Management Team** (2023) of IIT Jodhpur's Annual Cultural Fest **IGNUS**. Also appointed as **Assistant Head - Security & Game-Jam** for Youth Conclave (2022) at IIT Jodhpur.
- 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.