

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

## **FDUCATION**

#### **IIT JODHPUR**

B.TECH. IN COMPUTER SCIENCE & ENGINEERING

2021-2025 | Jodhpur, India CGPA : 7.28/10 (till 6th 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
Design And Analysis of Algorithms
Software Engineering
Database Management System
Operaring System
Pattern Recognition And Machine
Learning
Computer Vision
Cryptography
Cyber Security

## **SKILLS**

#### **PROGRAMMING**

- C C++ Python
- HTML CSS Javascript
- React ExpressJS NodeJS
- MongoDB MySQL
- Verilog

#### **MACHINE LEARNING**

- Scikit-Learn Scipy Numpy
- Pandas PyTorch NLP

#### **OTHER SKILLS**

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

## **PROJECTS**

## SHOWROOM ACCOUNTING WEBSITE | SOFTWARE DEVELOPMENT

B.TECH, IN COMPUTER SCIENCE & June 2024 | React, NodeJS, ExpressJS, MongoDB

- Developed a comprehensive accounting website for a showroom, featuring customer portfolio creation, customer payment and dealer payment tracking, expense management, and a wallet section displaying cash flow, dues and profit analysis for each month. Applied all CRUD operations.
- Implemented functionalities to store and display customer data, ensuring efficient financial management and reporting.

#### PANORAMIC PHOTO STITCHING | COMPUTER VISION

March 2024 - April 2024 | 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

- Created 3 different ML models to recommend movies. 1st model was made on the basis of genre and tags of the movies, 2nd on the basis of KNN clustering and 3rd on the basis of Collaborative Filtering (User Similarity).
- Used Kaggle dataset of Movies with their genre, rating, tags and views to train my Machine Learning Model.

# 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**.
- 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.