Ayush Bhut

Computer Science and Engineering
Indian Institute Of Technology, Jodhpur

+91-9426278580
ayushbhut007@gmail.com
Github | Portfolio | LinkedIn

EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech. (CSE)	Indian Institute of Technology, Jodhpur	7.31	2021-2025
Senior Secondary	Vidyadhish Vidyasankul, Gujarat	92.4%	2021
Secondary	Saint Mary's High School, Gujarat	92.33%	2019

EXPERIENCE

- **IIT Jodhpur (Federated Learning For Histopathology Image Analysis)** *Sep 2023 - Feb. 2024*
  Undergraduate Student Researcher | Supervisor : Dr. Angshuman Paul Jodhpur
  - 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.
  - **Tools & technologies used**: Python, Pytorch, Scikit-Learn, Grad-CAM

PROJECTS

- **AI-Powered Schedule Assistant** *Sep. 2024 - Oct. 2024*
  Website Development | ReactJS, NodeJS, ExpressJS, MongoDB, Llama3.2, Python
  - Developed a web application using the MERN stack, integrating LLAMA to generate personalized timetable schedules based on user preferences and tasks.
  - The platform features user authentication (sign-in/sign-up), task and preference addition, dynamic timetable display, chatbot integration, and a scheduling assistant that allows users to modify their schedules using natural language prompts. Also implemented email-based task notification alerts.

- **Showroom Accounting Website** *June. 2024 - July. 2024*
  Website Development | ReactJS, NodeJS, ExpressJS, MongoDB
  - Developed an accounting website for a showroom with features like customer portfolio creation and display, customer and dealer payment tracking, expense management, and monthly profit analysis.
  - Created Price List section with easy product and its sub-products price search.
  - Implemented all CRUD operations and search functionalities wherever required.

- **Panoramic Photo Stitching** *Mar. 2024 - Apr. 2024*
  Computer Vision | OpenCV, Python, Numpy
  - Developed a panoramic photo stitching technique which implemented algorithms for image alignment, feature detection, blending, etc to seamlessly merge multiple photographs into a single panoramic image.

- **Movie Recommendation System** *Mar. 2023 - Apr. 2023*
  Machine Learning | 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.

KEY COURSES TAKEN

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

TECHNICAL SKILLS

- **Programming:** C/C++, Python, SQL
- **Web Skills:** HTML, CSS, Javascript, ReactJS, NodeJS, ExpressJS, MongoDB
- **Libraries/Frameworks:** Pytorch, Numpy, Pandas, Scikit-Learn, NLP, Llama
- **Tools:** Git, GitHub, Latex, VSCode, Jupyter Notebook

ACHIEVEMENTS & RESPONSIBILITIES

- Solved 600+ Problems on LeetCode (1800+ rating) .
- Appointed as **Assistant Head - Event Management Team** (2023) of IIT Jodhpur's Annual Cultural Fest **IGNUS**.
- Appointed as **Assistant Head - Game Jam & Security** (2022) for 5th Edition of Youth Conclave at IIT Jodhpur.
- In JEE ADVANCED 2021 I Qualified in Top 1% among 1 million JEE aspirants.
- I stood 1st in school in IMO (International Maths Olympiad) in Std 10th.