RAHUL KUMAR PRAJAPATI

Indian Institute of Technology, Jodhpur

@ prajapati.2@iitj.ac.in   ☎ (+91) 8269140775   **in** https://www.linkedin.com/in/rahul-kumar-prajapati-0b60b5231/
⌗ https://github.com/Rprajapati8269

PROJECTS

Audio Signal Transmission

📅 Design Credit Project

- the projects aim was to transfer sound signal wireless ways.
- Audio signal is sents to led circuit through audio jack.
- uses 3 watt led for transmission of signal.
- receiving output on speaker with the help of solar panel or optocoupler.
- it is also running very well in optical fibre for long range transmission.

Movie recommendation

📍 Self Learning Project

- Uses k-nearest neighbors (KNN) algorithm to find movies similar to the input criteria.
- Filters movies by the desired release year and minimum preferred rating.
- trains KNN model on 'Year' and 'Rating' features to learn movie similarities.
- Predicts ratings for recommended movies and evaluates accuracy using mean absolute error (MAE).

Smart Irrigation

📍 Engineering Design Project

- In order to handle Irrigation issues, this project is used.
- we have used sensors such as moisture, wind and leaf sensor in this to capture data from plants.
- these sensors are conneted with moter,to find whether there is need of irrigation or not.
- based on sensor output, moter will automatically on and off.
- This will minimize the number of workers in a crop field, control and save water.

Mess Crowd counting

📍 B.tech project

- The project aims to build an app that displays real-time crowd in mess to help students avoid long queues.
- camera captures images of queue every 10 seconds.These images are fed into a pre-trained PyTorch Faster R-CNN model to count people.
- The people count and timestamp are recorded in a Google Sheet, which is updated in every 10 seconds.
- The Flutter app fetches data from the Google Sheet and displays the current crowd levels.
- The crowd levels are color coded into red, yellow and green to indicate high, medium and low crowds respectively.

EDUCATION

B.Tech in Computer Science and Engineering

IIT Jodhpur

📅 2020 – 2024   CGPA: 5.32

Dakshana Scholar

📅 2019-2020

Class XII

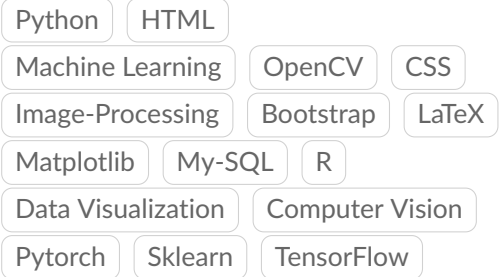**Jawahar Navodaya Vidhyalaya,Rajgarh**

📅 2019   91%

Class X

Jawahar Navodaya Vidhyalaya,Rajgarh

📅 2017   CGPA:9.8

SKILLS

Python · HTML · Machine Learning · OpenCV · CSS · Image-Processing · Bootstrap · LaTeX · Matplotlib · My-SQL · R · Data Visualization · Computer Vision · Pytorch · Sklearn · TensorFlow

TOOLS

VS Code · Google Colab · Microsoft Office · Raspberry pi · Wireshark · R Studio · Plotly · Matlab
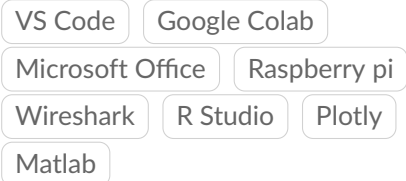
COURSEWORK

- Cyber Security
- Blockchain
- Data Structures and Algorithms
- Software Engineering
- Operating Systems
- Optimization in Machine Learning
- Pattern Recognition and Machine Learning
- Database Management Systems
- Foundation of Finance
- Computer Architecture
- Computer Networks