Pawar
Shubham

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Software Engineer

Education

- **Bachelor Of Engineering**
    - LDRP Institute Of Technology And Research
    - Gandhinagar, Gujarat
    - Year Of Passing: 2025
- **Diploma In Computer Engineering**
    - Government Polytechnic Ahmedabad
    - Ahmedabad, Gujarat
    - Year Of Passing:2022
- **SSC**
    - Nelson's High School
    - Ahmedabad, Gujarat
    - Year Of Passing:2019

Technical Skills

- Python
- Machine Learning
- Deep Learning
- Restful API
- Flask
- Computer Networking
- Docker
- Kubernetes
- React Native
- MySQL
- JavaScript
- Html
- CSS

Non - Technical Skills

- **Client Relationship Management:** Effectively communicated with clients to understand their needs and provide tailored solutions.
- **Market Research:** Conducted market analysis to identify potential clients and business opportunities.
- **Client Retention:** Maintained strong professional relationships to ensure long-term client satisfaction and repeat business.
- **Sales and Negotiation:** Demonstrated persuasive skills to close deals and onboard new clients successfully.
- **Conflict Resolution:** Addressed client concerns promptly to maintain trust and foster positive engagement.

Achievements

- **Implemented a deep learning model**
  - Created a neural network model to detect vehicles on a traffic signal.
- **Implemented a network**
  - Created and implemented a network between IOT devices like Raspberry PI, esp-32, esp-8266
- **Implemented CI-CD pipeline**
  - Created and implemented a CI-CD pipeline with Jenkins and python to integrate python app's docker images into Kubernetes cluster.
- **Implemented Docker**
  - Containerized python applications in Docker.
- **Implemented Kubernetes.**
  - Created and implemented Kubernetes clusters which contains docker containers.
- **Implemented and hosted a server**
  - Created and hosted a python and https server using g-unicorn server.
- **Implemented an online authentication system with security.**
  - Implemented an online authentication system using encrypted RESTful APIs and database connectivity using python and react native.
- **Implemented RESTful APIs**
  - Implemented RESTful APIs in python with flasks.
- **Implemented backend and databases**
  - Successfully implemented and managed multiple Python servers ensuring robust and scalable solutions for diverse project requirements.
- **Implemented a music crafting algorithm**
  - Created and implemented an music composing algorithm that exhibits an accuracy rate of approximate 90%.
  - The algorithm is designed and based on music theory.
- **Implemented Audio Streaming**
  - Implemented audio streaming using python and react-native. Which helped us to make our application lightweighted due to which the application took only adequate amount of memory.
- **Implementation of midi integration**
  - Created .midi files using python programming which can be imported.
  - these midi files are able to integrated in any Digital Audio Workstation (DAW).

- **Implemented Audio processing.**
  - Implemented Audio Processing using python modules like NumPy, pyAudioAnalysis, PyDub, etc.
- **Implemented UX Designs**
  - Implemented User Experience Designs in react-native designs.
  - also have hands on experience with figma and miro.
- **Testing and Debugging**
  - also have hands on experience with testing and debugging of python, react native and java script codes.
- **Implemented Axios APIs**
  - Implemented APIs with Axios in React Native to enhance data fetching and API communication, improving the efficiency and responsiveness of the application.
- **Implemented download feature.**
  - Successfully implemented an "Download" feature, enhancing user interaction and providing a personalized experience within the application
- **Implemented the wav file creation algorithm.**
  - Implemented an algorithm which can create wav files after taking midi and chord progression as input.
- **Implemented add to favorites feature**
  - Successfully implemented an "Add to Favorites" feature, enhancing user interaction and providing a personalized experience within the application.
- **Implemented decision tree model**
  - Successfully implemented decision tree model for machine learning.
- **Implemented random forest model for machine learning**
  - Successfully implemented random forest model for machine learning.

Accomplishments

- Internship on DevOps
  - Host: CloudSpikes MultiCloud Solutions Inc.
  - Date: 18/11/2024 to 18/12/2024
  - Certificate: CloudSpikes-Certificate

- Received fundings of 90K INR
  - Host: KSV SSIP CELL.
  - Date: 28/10/2024
  - Description: Received fundings for DTCS project.

- Placed 1ST at Project Expo 2022
  - Hosted By: Government Polytechnic Ahmedabad
  - Candidates: 60 Teams
  - Date: 5/4/2022 TO 6/4 /2022
  - Certificate: Expo-Certificate
- Internship on Python Programming
  - Host: INFOLABZ Ahmedabad
  - Date: 24/5/2021 to 8/6/ 2021
  - Certificate: Infolabz-Certificate

PROJECTS

- **DYNAMIC TRAFFIC CONTROL SYSTEM – PHASE 2**
  - TECHNOLOGIES: PYTHON | DEEP LEARNING | DATA PREPROCESSING | MODEL TRAINING AND OPTIMIZATION
  - DESCRIPTION: IN PHASE 2 OF THE DTCS PROJECT, A MACHINE LEARNING MODEL, SPECIFICALLY IS INTEGRATED INTO THE SYSTEM TO ENHANCE TRAFFIC MANAGEMENT CAPABILITIES. THE MODEL PROCESSES LIVE CAMERA FEEDS AT INTERSECTIONS TO DETECT VEHICLE DENSITY IN ALL LANES. THIS REAL-TIME ANALYSIS INFORMS DYNAMIC ADJUSTMENTS TO TRAFFIC SIGNALS, OPTIMIZING FLOW AND MINIMIZING CONGESTION.
  - TIMELINE :- 2024 – 80% COMPLETED.
  - GITHUB LINK : - NA

- **DYNAMIC TRAFFIC CONTROL SYSTEM – PHASE 1**
  - **TECHNOLOGIES:** PYTHON | MICRO PYTHON | RASPBERRY PI | COMPUTER NETWORKS
  - **DESCRIPTION:** THE DYNAMIC TRAFFIC CONTROL SYSTEM (DTCS) IS AN IOT-DRIVEN SOLUTION DESIGNED TO OPTIMIZE TRAFFIC FLOW FOR EMERGENCY VEHICLES. IT EMPLOYS A DECENTRALIZED ARCHITECTURE USING ESP8266 AND ESP32 MICROCONTROLLERS, COORDINATED BY A CENTRAL RASPBERRY PI. THE SYSTEM DYNAMICALLY ADJUSTS TRAFFIC SIGNALS BASED ON REAL-TIME COMMUNICATION BETWEEN EMERGENCY VEHICLES AND TRAFFIC NODES VIA WIFI. THIS SETUP PRIORITIZES EMERGENCY VEHICLES WHILE MINIMIZING DISRUPTIONS, ENHANCING RESPONSE TIMES IN URBAN AREAS. BY LEVERAGING LOW-COST HARDWARE AND ROBUST COMMUNICATION PROTOCOLS, THE DTCS DEMONSTRATES AN EFFICIENT AND SCALABLE APPROACH TO SMART TRAFFIC MANAGEMENT.
  - **TIMELINE :** 2024
  - **GITHUB LINK :** NA

- **SkyChords**
  - **Technologies:** Python | React Native | MySQL | G-unicorn
  - Description: An android application which creates infinite amount of chord progressions or basic melody. Which contributes to overcome beat-block of both new and experienced musicians around the world to compose a new melody.
  - **Timeline :** 2022
  - **GitHub Link :** SkyChords (Private)

- **Phishy**
  - **Technologies:** Python | Machine learning
  - **Description:** A python program which can be used to identify Phishing sites from the internet. This project implements Machine learning and handwritten random forest model and Mendeley datasets to identify the phishing sites. The program shows accuracy of about 92%.
  - **Timeline:** 2023
  - **GitHub Link :** Phishy

Links

LeetCode GitHub LinkedIn