

PRATHAM HARSHVARDHAN DAVE

Hyderabad, Telangana, India

📞 +91-7730814817 📩 dave.pratham@proton.me 💬 pratham-dave-01bba61ba 💡 FortemDave 💤 pratham-dave

EDUCATION

Indian Institute Of Information Technology, Dharwad

B.Tech - Computer Science And Engineering - CGPA - 9.14 [2020-Current]

12 2020 – 12 2024

Dharwad, India

COURSEWORK / SKILLS

- Data Structures & Algorithms
- Operating Systems
- Compiler Design
- Design & Analysis of Algorithms
- Machine Learning
- Professional English
- Computer Architecture
- Database Management
- Software Engineering
- App Development
- Microprocessors & Micro-controllers
- Statistics & Data Analytics

PROJECTS

Full Body Workout Tracking and Guidance ↗ | Python, OpenCV, YOLO , Mediapipe February 2023

- Created an Object detection Model with **Primary (collected) Data**.
- Ensured the use of a proper YOLO Model to keep the application performance **real time** while maintaining **accuracy**.
- Trained a Model for body Tracking with the appropriate Body Posture for a given exercise for **pose detection and correction**.

UPI Authentication System ↗ | Git, Flutter, Python, Firebase

November 2022

- Created and managed a set of tables for storing and handling user data and authentication.
- Created an Android app for demonstration purposes and integrated it with the Machine Learning algorithm on the back-end using Firebase.

Translation Lookaside Buffer Simulator ↗ | C++, BitBucket, CMake, Comp. Arch.

January 2023

- Created a **Two-Level Translation Lookaside Buffer** which simulated several memory input types.
- Generating **Statistical Output** that could be used for further evaluation.
- Ensured **modularity** to make it simple to integrate with other pre-existing Computer Architecture Simulators for **testing and performance logging purposes**.

Automated Vending Machine ↗ | HTML, CSS, Bootstrap, Python, MySQL

October 2021

- The project was aimed at **enabling online transactions** on a Vending Machine **using a QR Code** to eliminate the need of carrying physical currency and provide increased hygiene to the users.
- Created **plans and UML Diagrams** and communicated deadlines to complete projects on time
- Integrated Database Functionalities to log customer transactions, payments and purchases.

WORK EXPERIENCE/INTERNSHIPS

Indian Institute of Technology, Roorkee

June 2022 – August 2022

Development Member

(Remote)Dharwad, India

- Assigned the task to build a segment of a Cache Simulator and to **integrate** it with a Ram simulator for a larger scale simulation.
- **Understood and Communicated with the team** in order to make the integration more seamless and efficient, while ensuring the proper functioning of both the simulators individually.

TECHNICAL SKILLS

Languages: Python, C, C++, CMake, Tensorflow, SKLearn, SQLite3, MySQL, NoSQL, Flutter, HTML, CSS, MATLAB, Dart

Developer Tools: VS Code, PyCharm, IntelliJ Idea Ultimate, Jupyter Notebook, Google Colab

Technologies/Frameworks: Linux, GitHub, Powershell, Git, Django, Shell, Bitbucket

EXTRACURRICULAR

National Service Scheme [NSS] ↗

April 2022 – May 2022

Public Service

Dharwad, India

- Spent time with colleagues to **educate the locals on the importance of education**, its necessity and the dire consequences one can face if not educated properly
- Participated in a **Sanitary Environment Program** to maintain a clean-and-green surroundings within the College campus.