

Nadimpalli Ujwal Srimanth Varma

+91 8639903153 - nusvarma@gmail.com - github.com/Ujwal-Srimanth

EDUCATION

DAV PUBLIC SCHOOL

CBSE

Hyderabad, Telengana, India

2019 Pass-out

Sri Aakash Junior College

Telangana State Board

Hyderabad, Telengana, India

2021 Pass-out

Amrita Vishwa Vidyapeetham

CGPA - 9.14

Coimbatore, Tamil Nadu, India

EXPERIENCE

Software Development Intern

Providence Global India

[June 2024] – [August 2024]

- Developed new features for corporate software, improving functionality and user experience.
- Worked with **Node.js**, **React.js**, **PostgreSQL**, and **Blob Storage** to build and manage applications.
- Applied **Agile** practices, including sprint planning and scrum meetings, to deliver iterative solutions.
- Integrated **AzureAD** for identity management and **KeyVault** for secure data storage.
- Adhered to corporate coding standards

PROJECTS

Indian school dropout rates

DBMS

Languages Used:- HTML, CSS, JavaScript, PHP

- **Purpose:** The purpose of this project is to address the issue of dropout rates in education by gathering relevant data, analyzing the underlying causes and try to develop a solution which can help drop-out students continue their education.
- Collaborated on a project to gather, organize, and analyze data on dropout rates.
- Defined schemas and attributes, established relationships using Entity-Relationship diagrams, and normalized data for consistency.
- A Complete application was created present data attractively for analysis using plots.
- Designed and implemented a front end prototype to support dropped-out students in continuing their education up to the 10Th grade.

Library Management System

Object Oriented Programming

Language Used:-JAVA

- **Purpose:** The project aimed to strengthen understanding of object-oriented programming (OOP) concepts, particularly in Java, and gaining practical experience in fundamental OOPS concets.
- Created a comprehensive class diagram outlining classes, objects, methods, and relationships for a library management system.
- Implemented all classes in Java, focusing on functionalities such as reserving books in advance, issuing books, returning books, and managing user and staff details.

BRAIN TUMOR PREDICTION

Machine Learning

Language Used:-Python

- **Purpose:** To showcase the effectiveness of utilizing simpler machine learning techniques, such as KNN, over complex deep learning algorithms like CNN, for image classification tasks
- Utilized pure machine learning algorithms for image classification into melanoma tumor, pituitary tumor, no tumor, and glioma tumor.
- Preprocessed image data using PIL, NumPy, and pandas, including techniques like flattening arrays, addressing class imbalances with SMOTE analysis.
- Employed PCA for dimensionality reduction to enhance model performance and followed it with hyperparameter tuning.
- Evaluated models using various metrics, consistently proving KNN to be the most effective.
- A user interface was developed, which enables the uploading of MRI scans, after which it displays the type of tumor.

Recommender Smart Cart

Embedded Systems, Machine Learning

Language Used: -MicroPython, Python

- **Purpose:** To automate the billing process and increase the sales by recommending closely associated products
- Developed a prototype for an automated billing system where product addition to the cart triggers automatic billing and notifications sent to the user's mobile device.
- Integrated Raspberry Pi Pico board and RFID tags for product identification and tracking.
- Utilized RFID scanner to sense RFID tags attached to products as they are entered into the cart.
- Used the Pushbullet API for sending notifications to mobile device.
- Designed functionality to send notifications about product addition, current total, and recommendations for additional products to buy.
- Included a feature to send a notification about the entire bill once all products are added to the cart.

CERTIFICATIONS

Certificate of Completion of the Industrial Project

Issuing Organisation - SAP LABS

Issue Date - 26-07-24

Project Title - Efficient Code Review Automation

- **Role:** Backend Developer
- **Tech Used:** NodeJS, ReactJS, AWS
- **Purpose:** To streamline and automate the code review process using AWS CodeGuru. Traditionally, developers had to manually upload their code to an S3 bucket and initiate a pull request to get code recommendations from AWS CodeGuru. This project aimed to eliminate the manual steps and provide a seamless experience for developers.
- **Description:** In this project, we developed a web-based application to automate the code review process. Users can simply upload their Java or Python code through the website, and the system handles the rest. My role as a backend developer involved creating a middleware that efficiently manages the following tasks:
 1. Accepts uploaded code files.
 2. Uploads these files to an S3 bucket.
 3. Automates the pull request process to AWS CodeGuru's API.
 4. Retrieves and processes the code review recommendations.
 5. Sends the recommendations back to the frontend for user display.

SKILLS

Programming Languages: Python, C++ , JAVA , HTML , CSS , JavaScript/TypeScript , NodeJS , ReactJS

SQL and NoSQL: MySQL, MongoDB, PostgreSQL

Libraries and Tools: Sklearn, Pandas, Numpy, PIL

Soft Skills: Collaboration and Teamwork, Adaptability, Leadership

AREAS OF INTEREST

- Machine Learning
- Data Structures and Algorithms