Nikhil Jain

+917385957267 1008nikhiljain@gmail.com nikhil.jain22@vit.edu Linkedin Github

Education

Vishwakarma Institute Of Technology, Pune **2022-2026**
Bachelor of Technology in Computer Science (AIML) *CGPA-8.74*

Experience

Flutter Head | Quark Club, College **October 2023**

- Organized and managed Hackenvision, Quark's flagship event, which consisted of free speaker sessions and workshops on cyber security and CTF, and gave membership sessions worth 250rupees each.
- Training coordinators with flutter skills by giving and monitoring tasks and conducting internal competitions.

AE900(Industry Project)| *Dart, microcontroller, Syncfusion Library, Flutter, State-management* | GitHub **Jan 2025**

- Flutter app for visualization and finding insights in real-time and saved CSV data sent through a blue-tooth module
- Bluetooth connection with **microcontroller(ESP32)** to receive real-time data, Plotting graphs with filters with **Syncfusion charts API**, handling state management using **provider** package in Flutter, Showing and alerting if the data exceeds the certain range input by the user, PDF generation, and download in Flutter

Projects

Multi-Model, CBIS-DDSM Dataset Detection | *Deep Learning, Transfer Learning, Feature Fusion*| Kaggle **Oct 2024**

- Used a 6.3GB Kaggle dataset for breast cancer, preprocessed images with GPU T4, and trained 8+ Deep Learning Models for prediction, each taking 1-2 hours.
- Transfer learning was utilized to fine-tune pre-trained models (**Resnet, Densenet, VGG19, Inception V3**) with the dataset.
- To extract features, multiple pre-trained models are combined into a single array (**Feature Fusion**), followed by SVM prediction following dimensionality reduction by PCA.
- A custom CNN model with 5 convolutional layers, **ReLU**, and **Softmax** activation function was trained.
- Inception V3 had the highest training accuracy at 90.8%.

Geo-Clean | *React JS, Node JS, Geospatial Mapping, KML, Mongo DB Atlas, CLIP, Google MyMaps*| GitHub **Feb 2025**

- Developed a full stack **geospatial complaint management system** for **Pune Municipal Corporation (PMC)**, mapping **15 wards** and Mukaddam areas using **KML data and GIS**.
- Implemented **CLIP** to verify user complaints via images and workers' responses.
- Implemented **polygon-based geolocation detection** using Shapely to automatically assign complaints to the correct Sanitary Inspector and Mukaddam based on latitude and longitude.

Healthify| *Python, Matplotlib, TensorFlow, Web Scrapping, Hugging Face, Langchain, Gemini API* | Github **April 2024**

- Logistic regression, SVM, and Decision Tree are used to classify diabetes using the CSV dataset. CNN is applied to Image processing of eye retina images, through which diabetes can be predicted.
- Web scraping and collecting CSV data of the most frequently asked questions were used as a dataset for Chatbot.
- Python's UnstructuredURLLoader for scrapping web data, Hugging face for converting in embeddings, Vector database for storage and quick retrieval, Gemini API for forming Human readable answers.

Technical Skills

Languages: C++, C, Python, SQL, Dart, Java(Basic), Javascript(Basic)
Artificial Intelligence(ML, DL): CNNs, Tensorflow, Keras, OpenCV, NLP, AI-powered chatbots, Data Preprocessing, Model Evaluation
Databases and Developer Tools: Firebase, MySQL, Git, GitHub
Frameworks and Libraries: Flutter, ReactJS, NodeJS, Flask, REST API, Auth2.0, Figma
Relevant Coursework: Data Structures, OOP, Database Management System, Operating System, Computer Networks

Key Courses Taken

- IBM Full Stack Software Developer Professional Certificate
- Nvidia(Fundamentals of Deep Learning)