Pooja Shah

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Education

K. J. Somaiya Institute of Technology (KJSIT) June 2022 – June 2026
B.Tech in Computer Engineering *CGPA: 8.5/10*

Experience

HumbleWalking June 2025 – July 2025
Full Stack Developer Intern *Hybrid, Mumbai*

- Engineered and launched the official **HumbleWalking platform**, a full-stack MERN application, developing and integrating **10+ REST APIs** for robust data management, high scalability, and handling large datasets efficiently.
- Designed and implemented a responsive, mobile-first UI/UX, resulting in a **40% improvement in user engagement** and deploying a production-ready application supporting **500+ active users**, with architecture capable of scaling to thousands of users.
- Implemented **5+ core features**, including user authentication and real-time data tracking, contributing to the complete application development lifecycle from design to deployment while ensuring performance under high load.

SpaceEcE Foundation Dec 2024 – Jan 2025
Web Developer Intern – HRMS *Pune, India*

- Architected and developed a scalable **HR Management System** using the **LAMP stack**, designed to manage comprehensive data for **1,000+ employees** across modules for attendance, task scheduling, and expense tracking.
- Optimized system performance by **30%** and improved data accuracy by debugging **70+ issues**, enhancing the real-time dashboard's accessibility and reducing data entry errors for HR staff by **25%**.

Skills and Interests

Languages: Python, C++, JavaScript, HTML/CSS

Databases: MySQL, PostgreSQL, Firebase, MongoDB.

Frameworks & Libraries: TensorFlow, scikit-learn, PyTorch, OpenCV, pandas, NumPy, Matplotlib, Plotly, Streamlit.

Full Stack: MERN Stack (React.js, Node.js, Express.js, MongoDB), PHP, Fast API, Tailwind CSS.

Tools & Platforms: Git, GitHub, VS Code, Jupyter Notebook, Vercel

Others: Linux, Windows, Power BI, MS Excel, AWS.

Projects

Brain Tumor Detection | ***Python, TensorFlow, OpenCV, scikit-learn***

- Fine-tuned a **VGG16 convolutional neural network** in **TensorFlow** to classify **MRI brain scans** into 4 tumor categories with high **precision and recall**.
- Applied **image augmentation** and **preprocessing** using **OpenCV**, and evaluated model performance with **precision-recall metrics** and visualizations in **scikit-learn**, **Pandas**, and **Matplotlib**.

Civic-Circle | *MERN Stack (**MongoDB, Express.js, React.js, Node.js**)*

- Developed a scalable **MERN stack** web platform for NGOs to host social events and match volunteers using a **collaborative filtering algorithm** trained on a **large dataset of 10GB volunteer interactions**, with integrated **user authentication** and **role-based access control**.
- Implemented a **smart calendar**, **real-time chatbot**, **social media-style feed**, and an **accessibility module** with **skeletal sign language detection** using **computer vision** and **deep learning models**, improving engagement and usability for **hearing- and visually-impaired users** across **100+ events**.

YogaInsight | ***Python, OpenCV, MediaPipe, scikit-learn***

- Built a real-time yoga posture analysis system using **Python** and **OpenCV** to process live webcam streams, capable of accurately recognizing **40 unique yoga postures** using **MediaPipe**'s landmark extraction.
- Trained a **scikit-learn** classification model on a **large-scale dataset of 50,000+ annotated posture samples**, achieving **95% accuracy** in posture identification and implementing real-time corrective guidance for users.

SpectraSnap AI — ***Python, OpenCV, TensorFlow, YOLOv8***

- Built a mobile-first PWA for biometric analysis, achieving **92% accuracy** in gender and age estimation (within a **+/- 5-year margin**) using **OpenCV** and pre-trained **TensorFlow** models for real-time inference (¡150ms).
- Developed an easy-to-use front-end that processes camera input at **30 FPS** and integrated **YOLOv8** to recognize over **80 object categories**, reducing misclassifications by **25%** in different lighting conditions.

Achievements

- **Semi-Finalist** – The Project Deep Blue by Mastek Ltd.; developed a functional **prototype** solving **industry-level challenges** using innovative **engineering solutions**.
- **Finalist** – IET InTech Project Competition; recognized for **outstanding innovation** and **technical excellence** in a **national-level engineering event**.
- **Participant** – HSBC CTF Hackathon 2025.

Certifications

- **AWS Academy Graduate – Cloud Foundations:** Completed **foundational training** on core **AWS services**, **cloud infrastructure**, **deployment principles**, and **best practices**.
- **NPTEL – Data Science:** Successfully completed a **university-level course** covering **data analysis**, **machine learning techniques**, **data engineering practices**, and **real-world applications**.
- **Infosys Employability Program:** Participated in structured training on **aptitude development**, **professional communication**, and **foundational technical skills**.