DHRUVIN PATEL

Vadodara, Gujarat, India

+91 9099030299 ⬦ dhruvinpatel1409@gmail.com ⬦ Linkedin ⬦ Github

EDUCATION

CHARUSAT University, Nadiad, Gujarat **2020 - 2024**
B. Tech in Information Technology. CGPA: **9.45/10**

EXPERIENCE

Sahajanand Technologies Private Limited (STPL) Surat, Gujarat
Python Research and Developer Intern Dec 2024 - Present

- Developed and implemented a system for accurate detection and analysis of rough diamond laser markings to enhance precision in diamond cutting processes.
- Designed and developed a proprietary algorithm to detect predefined markings on rough diamond surfaces, effectively handling high reflections and irregular surfaces.
- Utilized technologies such as image processing, deep learning, and machine learning to integrate real-time imaging with advanced analysis techniques.

E-Infochips Private Limited Ahmedabad, Gujarat
AI/ML Engineer May 2023 - July 2023

- Implemented a Hand Gesture Recognition software to accurately identify and interpret various hand gestures for interactive applications.
- Leveraged TensorFlow.js, Handpose, and additional libraries such as React, Webcam, and custom utilities to develop and deploy the hand gesture recognition software.

PROJECTS

Disaster-Risk-Monitoring-Using-Satellite-Imagery Github

- Led the development of a satellite imagery-based disaster risk monitoring system, enhancing computer vision and data processing capabilities within a machine learning workflow.
- Utilized NVIDIA's DALI, TAO Toolkit, TensorRT, and Triton Inference Server to optimize and deploy deep learning models, ensuring efficient performance and scalability.

American-Sign-Language-Model Github

- Engineered an advanced American Sign Language recognition model, integrating convolutional neural networks to significantly boost interpretation accuracy and streamline communication for the deaf community.
- Refined American Sign Language model in Python, using CNNs and data augmentation. Achieved 98.76% accuracy in real-time recognition tests.

Aadhaar-Card-Validation-Tool Github

- Developed an Aadhaar Card Validation Tool, employing optical character recognition (OCR) to accurately verify the authenticity and details of Aadhaar cards.
- Implemented the validation tool using OCR technology, enhanced with numpy for numerical operations and PIL Library for image processing, ensuring robust performance and accuracy.

SKILLS

Languages	C, C++, Java, Python, Mojo
Specialized Skills	Artificial Intelligence, Machine Learning, Deep Learning, Image Processing with Computer Vision, PowerBI
Database	MongoDB, SQL
CS Fundamentals	Data Structures and Algorithms, OOP, Operating System, DBMS

ACHIEVEMENTS AND RESPONSIBILITIES

- Microsoft Certified: Azure AI Fundamentals
- Microsoft Certified: Azure Data Fundamentals
- Microsoft Certified: Azure Fundamentals
- NVIDIA: Getting Started with Deep Learning
- NVIDIA: Disaster Risk Monitoring Using Satellite Imagery
- TCS Campus Ambassador Certificate