SMIT MISTRY

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Education

Sal Engineering and Technical Institute　　　　　　　　　　　　　　　**Sep 2021 – Jul 2025**
Bachelor of Engineering in Computer, Minor in Data Science　　　　　　　*Ahmedabad, Gujarat, India*
CGPA is **8.57**

Experience

Udbhav　　　　　　　　　　　　　　　　　　　　　　　　　　　　**May 2024 – Jul 2024**
Machine Learning　　　　　　　　　　　　　　　　　　　　　　　　*Ahmedabad, Gujarat, India*

- **Extracted 1M+ Images** from **traffic video** and **Processed** and **Optimized** data on **LabelImg** using **Python.**
- **Boosted research by 50%** via **Tesseract OCR** and **Yolov8 Object Detection** model, resulting in **research breakthrough.**
- **Heightened performance** by **25%** by implementing **Data Augmentation** and **early stopping** techniques.
- **Produced 20+** visually compelling **plots** for **non-technical** team members with **Tensorflow.**

Smart Shopping Cart　　　　　　　　　　　　　　　　　　　　　　**Dec 2023 – Feb 2024**
Machine Learning　　　　　　　　　　　　　　　　　　　　　　　　*Ahmedabad, Gujarat, India*

- **Led** a **team of 3** in developing **Deep Learning Models** using **TensorFlow** GPU to groceries.
- **Compiled the dataset by capturing frames** from grocery videos and **annotating them using LabelImg**, creating a dataset of **10,000+ images**, and achieving over **70% accuracy** on the **test set.**
- **Improved accuracy** by **20%** using **VGG16 CNN** model for **Object Detection** and **Transfer Learning.**
- **Evaluated model performance** using **statistical** metrics such as **Precision 85%, Recall 80%, F1-Score 82%,** and **ROC Curve.**

Sal Engineering and Technical Institute | GitHub　　　　　　　　　　**Sep 2023 – Oct 2023**
Data Scientist　　　　　　　　　　　　　　　　　　　　　　　　　*Ahmedabad, Gujarat, India*

- **Automated Result Analysis** by creating the **GTU Result Analyser Web App** using **Python Pandas library** enhancing **data manipulation and analysis**, **reducing manual processing time** by **80%.**
- **Enhanced faculty's result analysis efficiency** by **60%** via data-driven strategies and **visualization.**
- **Implemented Flask** backend to manage **server-side operations** and **routing**, **Designed** a **responsive front-end** for **raising user accessibility** by **45%.**

Projects

SpeechStream | *Transformers, Flask, MongoDB, HTML/CSS/JS* | GitHub　　**May 2024 – Jun 2024**

- **Created** a **Flask web application** using fine-tuned **Wav2Vec2** and **SpeechT5 models** for speech-to-text and text-to-speech functionalities.
- **Utilized Hugging Face models** to enhance speech processing capabilities.
- **Engineered backend system** utilizing **Flask framework** and **MongoDB database**, fortifying **login, and signup functionalities** with **secure user authentication protocols**; bolstered **data protection** and **streamlined user verification process**, resulting in a **40% decrease in unauthorized access attempts**.

Rajkot Municipal Corporation (RMC) Chatbot | *Dialogflow, FastAPI, MySQL* | GitHub　**Dec 2023 – Dec 2023**

- **Integrated Dialogflow's NLP** and **Intent Classification** for efficient user interactions.
- **Utilized FastAPI Python backend** for seamless functionality.
- **Designed** intuitive **frontend** using **HTML/CSS** for optimal user experience.

Technical Skills

- **Languages**: Python, SQL, Java
- **Libraries**: Scikit-learn, LightGBM, TensorFlow, PyTorch, Keras, MediaPipe, Pandas, NumPy, Matplotlib, NLTK, Seaborn, XGBoost
- **Frameworks**: Flask, FastAPI, BentoML
- **Software / Tools**: MySQL, MongoDB, GitHub
- **Technologies / Concepts**: Agile Methodology, Software Development Life Cycle, RESTful APIs, NoSQL, Machine Learning, Deep Learning, Recurrent Neural Networks, Convolutional Neural Networks, Natural Language Processing

COURSE CERTIFICATIONS

Machine Learning Specialization　　　　　　　　　　　　　　　　　**Oct 2023 – Dec 2023**
Offered by Stanford Online & Deeplearning.ai on Coursera