Siddharth S Desai

8605904483 siddharthsd@iisc.ac.in siddharthdesai0602@gmail.com /siddharthdesai06/ siddharthdesai06

Education

M.Tech in Robotics and Autonomous Systems **Aug. 2023 – June 2025**
Indian Institute of Science, Bangalore

B.Tech in Computer Science And Engineering (Intelligent Systems) **Aug. 2019 – June 2023**
Maharashtra Institute of Technology, Loni Kalbhor, Pune, Maharashtra

Relevant Coursework

- Introduction to NLP
- Speech Information Processing
- Machine Learning for Data Science
- Edge-AI
- Embodied Perception
- Data Science for smart city Applications
- Mathematical Techniques (Linear Algebra and Probability)
- Applied Linear and Non-Linear Control

Major Projects

Self Driving Car Simulation using CNNs:

- **I** successfully trained a self-driving car using Convolutional Neural Networks (CNNs). The project involved utilizing the open-source Self-Driving Car Simulator provided by Udacity. I adopted the model proposed by NVIDIA in one of their research papers.

Link Prediction in a Graph Network:

- **C**onducted Link Prediction in a Graph Network, specifically addressing the challenge of determining the authenticity of links within the extensive Twitter dataset. The primary objective was to discern whether a given link represented a genuine connection or if it was a false or fabricated edge.

EDA on MNREGA Dataset:

- **C**onducted impactful Exploratory Data Analysis on the MNREGA Dataset, revealing valuable insights. Uncovered hidden information with direct relevance to potential applications for the Indian Government. Proficiently distilled key findings to inform strategic decision-making.

Mini Projects

Restaurant Name and Menu Generator using LLMs

- **D**eveloped a project centered around the Large Language Model (LLM) architecture, enabling the generation of unique and fancy restaurant names along with menus based on input cuisine. Designed a sleek user interface with Streamlit for seamless interaction. Leveraged the Google PaLM API for efficient model output generation.

Parking Space Counter using Open-CV

- **I**mplemented a parking space monitoring system using OpenCV in this project. It evaluates parking availability by processing images through Gray-Scaling, making decisions based on the comparison of black and white pixel counts.

Face Recognition Based Attendance Management System

- **U**tilized Haar-Cascade Classifier for precise face detection in this project. The detected faces were then cross-referenced with a ground truth dataset containing student images, facilitating automated attendance marking in an Excel sheet.

Technical Skills

Languages | **Tools**: Pytorch, TensorFlow, Keras, Numpy, Hugging Face, LangChain, Streamlit, C++, Scikit-learn, Pandas.

Technical: Worked on Computer Vision, Clustering, EDA, Learning Algorithms, CNNs.

Academics Accomplishments | Extracurricular

- MIT-ADT Talk Finalist (2020-2021)
- Stood 3rd in Aptimania Quiz (2020-2021)
- 0.1 Certificate from CBSE (2019-2020)