# TUSHAR THORIYA

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HuggingFace | LeetCode | kaggle Kaggle

## Work Experience \_

Research Intern TSS Mumbai, India 11/2023 - Present

- Developed a web scraping bot for the CIBIL website, targeting the list of defaulters in India with above 1 crore amount, producing production-ready scraping code.
- Achieved capability to scrape over 1 lakh data entries every month within a stringent 48-hour timeframe.
- Implemented robust and scalable solutions, ensuring seamless data extraction for ongoing and future requirements.
- I fine-tuned the Falcon-7B model to address missing information in Aadhar card addresses, ensuring completeness in address details
- This tailored model effectively completes missing details such as zip codes, cities, states, street addresses. with 99% accuracy.
- key skills: Selenium, LangChain, Retrieval-Augmented Generation (RAG), HuggingFace, Transformers, Quantization

Intern Analytics Valley Banglore, India 05/2023 - 10/2023

- Internship Focused on developing and implementing APIs, emphasis on building robust and efficient systems. Involved in machine
  -learning tasks and Database.
- Developed a robust and efficient database API as part of an internship program using **Django** and **rest framework**.
- key skills: Python, Django, rest framework, FastAPI

### Projects \_

### Build an LLM ChatBot application based on RAG

- I built the RAG base ChatBot application using a Pinecone vector database, a <u>Llama-2</u> 13B chat model.
- The Al-powered application has had a profound impact on data-driven decision-making processes across multiple industries. By Streamlining access to valuable data insights and automating complex analysis tasks, the application has empowered user to make Informed decisions with confidence.

### Deployed FoodVision101 model on HuggingFace

- Developed a FoodVision101 classification model using PyTorch that accurately recognize 101 categorizes food items in real-time images.
- Click Hugging Face to see model deployment on Hugging Face.

## **Brain tumor Detection using Deep Learning**

• Developed a state-of-the-art deep learning model for brain tumor detection using Python, Fast.ai and PyTorch with 84% Accuracy.

## Skills\_

- Languages: Python | C/C++
- Machine Learning: Scikit-learn | OpenCV | Pandas | NumPy | Matplotlib | Selenium | Django | Flask | FastAPI
- Deep Learning: PyTorch | TensorFlow | Natural Language Processing(NLP) | ComputerVision | LangChain
- Generative AI: Large Language Models(LLMs) | LangChain | Generative Adversarial Networks(GANs)

### Education

### **B.S. COMPUTER SCIENCE-AI**

### Marwadi University

Rajkot, India 08/2020 - 04/2024

- Currently pursuing a Bachelor of Science in Artificial Intelligence. (GPA: 8.2/10)
- Relevant Coursework: Machine Learning, Deep Learning, Computer Vision, Robotics, Natural Language Processing(NLP). DSA, Probability and Statistics. Programming Languages (e.g., Python, C/C++).

#### **Achievements**

- SSIP Hackathon winner: Developed a smart-blind stick that utilizers ultrasonic sensor to detect obstacles and provides audio feedback to aid blind people in mobility. Smart stick features such as real time obstacle detection, tactile feedback, and GPS localization. (06/2023)
- Ranked in Top 96.91% on LeetCode: Ranked in the Top 96.91% on LeetCode platform, consistently solving challenging algorithmic problems in python.(click here <u>LeetCode</u> to see) (02/2023)
- Made a custom deep learning library for non technical people: made a custom library from scratch to implement load data,
   Training data, Testing data and model evaluation with few lines of code. (03/2022)