Raj Kapadia Email – <u>raajforyou@gmail.com</u> Mobile – 9558515995 <u>GitHub</u>, <u>Fiverr</u>, <u>Upwork</u>, <u>Youtube</u> Python, NodeJS, Dialogflow, Tensorflow, PyTorch, GCP, AWS

Team Lead (AI & ML) at Let's Enkindle with 6+ years of IT industry and freelance experience in LLM inference, training and application development, Assistant/Agent development using LLMs, API development with Python+Flask and NodeJS+Express, AI/ML/DL project development in the field of Image Classification, Object Detection, Natural Language Processing (NLP), search engine development using Vector Database, chatbot development on Google Dialogflow ES/CX. 4+ years of experience with Google DialogFlow and Actions on Google. Part-time YouTuber.

#### **SKILLS**

**Large Language Models (LLMs):** Fine-tuning, inference, application development **AI/ML/DL:** TensorFlow, PyTorch, Image classification, Object detection, NLP **API Development:** Python+Flask, NodeJS+Express (JavaScript/TypeScript)

**Cloud Platforms:** GCP, AWS

**Chatbot Development:** Google Dialogflow ES/CX

#### **EXPERIENCE**

#### Let's Enkindle

#### Team Lead AI & ML

September 2023 - Present

Development of different end-to-end AI/ML/DL/MLP products, developing SaaS products around LLM, chatbot development using Dialogflow ES/CX. Lead a small team of 5 developers as well.

# **Projects:**

- 1. A LLM and NLP powered Text to SQL application connected to WhatsApp, this application talks to SQL database in real time in Natural Language.
- 2. LLM Fine-tuning and Inference: Developed a pipeline for fine-tuning Large Language Models on specific datasets and created efficient inference systems for production use.
- 3. An image search functionality for a tile manufacturer to find similar looking images from a huge database provided a query image.

# The Other Fruit/Nes Tech Ltd Lead AI & ML Developer

**January 2022 - August 2023** 

Development of different end-to-end AI/ML/DL products to better serve our customer base. Lead a small team of 3 developers as well.

## **Projects:**

- 1. Developed an image similarity search engine, the main functionalities of this project are, inserting new images into the search engine, searching for a similar image, generating a comparative image when a similar image is found, Cron jobs to scrape images from multiple images sources and to insert new images into the search engine. The technologies used are Python, Tensorflow, Elastic, and OpenCV, this application is served using Python+Flask API endpoints.
- 2. Face recognition application as a biometric authentication, the main functionalities of this project are, registering a user, and authenticating the user, this application uses a deep learning library called "dlib", and finally, this application is served using Python+Flask API endpoint.
- 3. Development of voice as a password for two-factor authentication, facility to enroll a user, and verify a user, developed with Python, Elastic, and served using Python+Flask APIs.
- 4. Developed a toxic comment classifier, the technologies used are Python and PyTorch, served with Python+Flask APIs.
- 5. Developed an image search based on tags associated with images, technologies used are Python, Elastic, and Flask.

#### **Assistant Professor**

Taught students different subjects of Electrical Engineering and other tasks related to their development is the main task here, different technologies used in teaching are MATLAB, C for microcontroller programming.

# Sankalchand Patel College of Engineering, Visnagar, Gujarat August 2013 - July 2016 Assistant Professor

Taught students different subjects of Electrical Engineering and other tasks related to their development.

# Torrent Pharmaceutical Ltd, Indrad, Mehsana Executive Engineer

May 2010 - July-2011

Executive Engineer

HT & LT distribution and cable laying, switchgear installation for protection, VFD installation, etc.

## FREELANCE / FIVERR / UPWORK PROJECTS

I have a Fiverr and Upwork seller account where I have built 100+ Google Dialogflow ES/CX Chatbots for customers using NodeJS and Python as a backend to these chatbots.

- AI Agent Development: Created intelligent AI agents using large language models, capable of performing complex tasks and decision-making processes.
- Developed an end-to-end solution for Object detection, the main functionalities of this project are, to train a model using Tensorflow, evaluate the model, save the model, and finally load the model and serve it using Python+Flask API endpoint.
- YouTube channel where I upload videos on different subjects related to Google Dialogflow, Machine Learning, NLP, Artificial Intellegence, Large Language Model (LLM) etc.

#### **EDUCATION**

## Sankalchand Patel College of Engineering, Visnagar, Gujarat

Master of Engineering with specialization in Power System, 2011-2013, CPI – 8.3

## Global Institute of Technology, Jaipur, Rajasthan

Bachelor of Engineering in Electrical Engineering, 2006-2009, 67%