Chiraag M

+918073324066 ◇ chiraagmoni@gmail.com ◇ Bengaluru, Karnataka, India ◇ LinkedIn ◇ GitHub

EDUCATION

BTech in Civil Engineering, National Institute of Technology Karnataka — May '23
- Completed B.Tech from a prestigious institution with a focus on analytical problem-solving.

Pre-University in Science, Sundari Ananda Alvas's Composite PU college — May '19
- Completed intermediate education in Science, laying the foundation for a strong academic background.

EXPERIENCE

Intellipaat Software Solutions
Business Analyst Intern — Jun '23 — Dec '23
- Extracted KPIs from Sales Product Data for informed decision-making by using Python ,SQL and Power BI
- Developed periodic reports and dashboards to visualize client trends and sales performance.
- Managed and updated client interaction data in Zoho CRM to maintain accurate sales records.
- Generated insights from historical client data to assist the sales and marketing teams in targeting potential leads more effectively.
- **https://bit.ly/4gjoMTo**

PRINSTON SMART ENGINEERS
Data science Intern — Oct '22 — Apr '23
- Developed a real-time **Face Mask Detection** system using **YOLOv4-tiny**, leveraging **Python**, **Machine Learning** , and **Deep Learning** to enhance public safety and compliance monitoring.
- Designed and implemented a **Passenger Security System** using **Facial Emotion Recognition** with **Deep Convolutional Neural Networks** , achieving improved accuracy over traditional CNN models.
- Conducted model training, testing, and fine-tuning using large datasets to optimize performance and reliability.
- Integrated computer vision techniques for real-time video processing and emotion classification.
- **https://bit.ly/48eSnvU**

SKILLS

Programming & Scripting Python, SQL, Excel
Machine Learning & AI Supervised & Unsupervised Learning, Generative AI, Natural Language Processing, Chatbot Development, Model Deployment, MLOps, API Integration, Local Inference
Python Libraries & Frameworks Pandas, NumPy, Scikit-learn, Gradio, Seaborn, Matplotlib, Pyttsx3, SpeechRecognition, Pyaudio, Requests
AI Integration LLaMA 3, Ollama, Voice Interaction, Speech-to-Text (STT), Text-to-Speech (TTS), Real-time Interaction
Data Visualization Tableau, power Bi, Microsoft Visio, Google Data Studio
Tools & Platforms Jupyter Notebook, Zoho CRM, MySQL, Pandas (Python Package), power query, VS code
Soft Skills Strong Communication, Problem Solving, Analytical Thinking, Trend Identification, Strategic Decision Making

PROJECTS

Blade AI – LLaMA 3 Powered Local Chatbot Link — Apr '25
- Designed and developed a **voice- and text-based chatbot application** powered by the **LLaMA 3 language model**, hosted locally using **Ollama** for secure and efficient performance.
- Implemented a clean and responsive **user interface** using **Gradio**, enabling both text input and voice interaction through integrated buttons and event handlers.
- Integrated **speech-to-text (STT)** and **text-to-speech (TTS)** functionality using `speech_recognition`, `pyttsx3`, and `pyaudio`, allowing for seamless two-way voice communication.
- Created modular Python scripts to handle **API requests**, manage local inference, and process real-time user inputs and responses.
- Followed **MLOps best practices** for local deployment, including environment setup, dependency handling, performance testing, and modular code organization.
- Ensured low-latency interaction and error handling with the LLaMA model through optimized request-response logic using the `requests` library.
- Technologies Used: Python, LLaMA 3, Ollama, Gradio, speech_recognition, pyttsx3, pyaudio, REST API, Jupyter Notebook

Face Mask Detection using YOLOv4-Tiny – Object Detection Pipeline, Prinston Smart Engineers — Oct '22 — Apr '23
- Built a YOLOv4-Tiny object detection pipeline in Google Colab with full GPU acceleration using the Darknet framework.
- Automated data preparation, configuration setup, and model training using shell scripting and Python.
- Used `OpenCV` and `Matplotlib` for image preprocessing and inference result visualization
- Implemented real-time video detection via webcam using custom JavaScript and `IPython.display` for live streaming.
- Integrated audio feedback using `IPython.display.Audio` and `time.sleep()` for class-based alerts during inference.
- Employed modular design principles: separated preprocessing (`process.py`), JS-based webcam logic, and Python-based Darknet integration for better maintainability and debugging.
- Configured custom `.cfg`, `.data`, and `.names` files for multi-class object training and model tuning.
- Applied transfer learning by initializing with pre-trained `yolov4-tiny.conv.29` weights for faster convergence.
- **Technologies Used**: Python, YOLOv4-Tiny, Darknet, Google Colab, OpenCV, Matplotlib, IPython, JavaScript, Bash, Gradio (optional), Jupyter Notebook

CERTIFICATIONS

LinkedIn Learning & Microsoft

Career Essentials in Data Analysis, Skills Covered: Python, SQL, MS Excel, Power BI, Power Query, EDA, Macros.

Career Essentials in Generative AI, Skills Covered: LLM, AI, ML Ops, DL, CV, Prompt Engineering.

VOLUNTEERING

Member, NITK Photography club

Player, NITK Hockey Team