Halisahar - +91 6290632050 - akashparua999@gmail.com

### **Professional Summary**

I am a competent software development professional with experience in machine learning applications. Consistent in delivering clean, error-free, reliable code to meet current or expected needs. Well-versed in software trends and confident in multiple languages, frameworks and programming tools.

#### **Experience**

#### Proficient Vision Solutions Pvt. Ltd, IIT Kharagpur Research Intern

May 2023 to July 2023

# Kharagpur

- Sudipta Mukhopadhyay (Associate Professor in the Electrical and Electrical Communication Engineering, IIT Kharagpur)
- Technologies used OpenCV, PyTorch, CUDA
- Image Processing with OpenCV
- Cleaning and processing data for training Deep Learning models
- Fine tuning deep-learning object detection models (YOLO-NAS, YOLO-V8)
- Benchmarking performance of different object detection model
- Certificate: Akash\_internship\_certificate scanned\_20230814\_0001-1.pdf

### **Core Qualifications**

- 1. Machine Learning (Frameworks PyTorch, scikit-learn)
- 2. NLP-spaCy
- 3. Data Analysis (Pandas, Numpy)
- 4. Languages -C/C++, Python, Dart,SQL,Javascript,JAVA
- 5. Backend (Frameworks- FastAPI, Flask)
- 6. Android Development (Dart , Flutter , fast API ,Firebase, Flask)
- 7. UI Frameworks (Streamlit, Gradio ,Flutter)
- 8. Computer Vision OpenCV MediaPipe
- 9. Other Technologies TensorRT, CUDA, LangChain, Vector Databses

#### **Education**

### Indian Institute of Information Technology Kalyani

Current

**B. Tech** Kalyani GPA: 8.9

# **Accomplishments**

- Tutorme API -
- This project is an advanced AI question answer chat-bot that uses
- Flask, PinconeDB, TensorFlow, and OpenAI
- We extract text from the PDF into chunks, vectorized them and embed the text chunks in a vector database
- When a question is asked we find the most relevant text chunk as a query
- Lastly, we send the text as context to a LLM and ask relevant questions from the chunk
- <a href="https://github.com/AkashParua/tutorme">https://github.com/AkashParua/tutorme</a>
- FindPic -
- This project is an image search app that uses a vector database
- The system allows users to search for images by similarity in embedded vectors
- Uses PinconeDB, Fast API, Streamlit
- https://github.com/AkashParua/FindPic

# • miniVANET -

- A simple mobile app that sends message to the nearest hospital if panic mode is triggered
- Uses Flutter , Firebase
- <a href="https://github.com/AkashParua/FindPic">https://github.com/AkashParua/FindPic</a>
- <u>HAL4500</u> -
- Adding YOLO-V8 object detection to Lang-Chain agents
- Uses MediaPipe for gesture detection
- The app can respond to queries such as "What am I holding?", "What am I pointing at ?"
- https://github.com/AkashParua/hal4500.git
- Accomplishments -
- Shortlisted for the Final round of Election 2023 as for Team "Hacking Commission"
- Qualified for Embedded Security CTF (National CoE Indian Institute of Technology, Madras)
- Contact -
- Linked in : <a href="https://www.linkedin.com/in/akash-parua-76b2531b7/">https://www.linkedin.com/in/akash-parua-76b2531b7/</a>
- **GitHub**: https://github.com/AkashParua