Software Engineer Computer Science and Engineering ABES Institute Of Technology, Ghaziabad

## EDUCATION

## • B.Tech in Computer Science and Engineering

ABES Institute Of Technology, Ghaziabad

## EXPERIENCE

## • INZINT

Associate Software Developer

- Underwent extensive training in machine learning, deep learning, and GenAI (Transformers), building 4+ projects from scratch and gaining hands-on experience with various large language models.
- Developed proficiency in 30+ AWS services and utilized complex frameworks to build software applications.
- Engaged in the full software development life cycle process. Collaborated closely with cross-functional teams to design and develop architecture for complex AI software, honing skills in team-based software development.

## • GI VENTURES

AI/ML Trainee

- Gained expertise in industry standards for software development and utilized the NVIDIA DGXA100 AI supercomputer to advance research in computer vision, AI/ML, and other AI technologies.
- Collaborated on 5+ research projects, honed skills in deep learning and machine learning techniques, and worked with a team of 10+ trainers to drive innovation and discovery in AI research.

## Projects

## • MemorAI

- A context-driven Human like conversational chat support powered by LLMs leveraging RAG
- Increased customer satisfaction by 40% through 24/7 availability and instant responses to common inquiries.
- Reduced support ticket volume by 50%, allowing human agents to focus on complex issues, improving overall operational efficiency and achieved a 95% accuracy rate in understanding and addressing customer queries.
- Technology used: Python-Flask, LangChain/LlamaIndex, vectorDB's, LLaMA3/Mistral, ReactJs.

## Multi Person Face Recognition

A real-time multi-person identification system using machine learning and face recognition libraries.

- Implemented DLib's Machine Learning model for real-time multi-person identification in live video feed.
- Utilized face recognition libraries to encode face images of 1000 individuals from 5 different angles.
- Optimized the process using 'hog' model for efficient matching and identification on CPU computation.
- Technology Used: Python, Flask, Numpy, Pandas, OpenCV, Git, Docker.

#### • PPE Violation Detection

Developed an automatic alert system with 97% accuracy to detect individuals without Personal Protective Equipment (PPE).

- Trained a custom model on a 3000-image dataset using PyTorch, YoloV7, integrated Gmail API for alerting emails.
- Deployed the application on NVIDIA DGX A100 server for real-time, accurate PPE violation detection.
- Technology Used: Python, OpenCV, YoloV7, PyTorch, Gmail API, NVIDIA DGX A100.

## TECHNICAL SKILLS AND INTERESTS

Languages: C, Python, JavaScript, Dart Libraries : Transformers, Keras, Pandas, scikit-learn, Matplotlib, OpenCV, React.js Development-Tools: AWS, Firebase, Git/GitHub, Docker, PostMan, Unix Shell, VS Code Frameworks: Flask, Express, Flutter, PyTorch, LangChain, LlamaIndex Databases: Relational Database(MySQL), MongoDB, SQLite Relevant Coursework: Data Structures & Algorithms, OOPS, Database Management System Soft Skills: Self-learning, Presentation, Adaptability, Communication

# CERTIFICATIONS

## UDEMY - Python ${\boldsymbol{\mathscr{O}}}$

- Certified by Udemy for Python Programming language completion.
- Date: June 2023 July 2023

## Dev<br/>Town - Full Stack Web Development ${\boldsymbol{\mathscr{O}}}$

- Awarded with training completion certificate in Full Stack Web Development by DevTown
- Date: May 2023 Aug 2023

J +91-7007513160
■ ayushgupta9592@gmail.com
♀ GitHub Profile
■ LinkedIn Profile
➡ Personal Portfolio

Feb 2024 - July 2024

Oct 2022 - April 2023

2020-2024

7.1 CGPA