

Yogesh Nain
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- I have around 8 years of experience in data science fields related to computer vision, deep learning, predictive modeling and data engineering.
 - 5+ years of experience in MLOPs and deployment planning for machine learning models.
 - 2+ years of experience in data engineering.
 - 4+ years of experience in team management and planning.

TECHNICAL SKILLS SUMMARY

- Programming Languages : C, C++
- Scripting Languages : Python, JavaScript, Bash
- DataBases : SQL, MongoDB
- OS : Linux, Windows, MacOS
- Others : HTML, CSS, Flask, AWS, Git, ReactJS

EXPERIENCE HISTORY

- **Sr. Data Scientist | Akaike Technologies, Bangalore** **[Oct-2021 - Till Date]**
 - As a senior data scientist my role and responsibility is to conceptualize and create a detailed plan for solutions and manage my team to deliver projects on time.
 - Create computer vision solutions of different use cases like object detection, object tracking, object clustering based on similarity.
 - Create predictive analytics models for different types of structure and unstructured data, time series forecasting for such data.
- **Sr. Software Engineer | CREEDAI, Delhi** **[Feb-2021 - Sep-2021]**
 - My role and responsibility was to create a video analytics solution for multiple use-cases. Some of these solutions were related to video surveillance, creating super resolution images, processing gis data.
 - Help the team to create solution documents and gather requirements from clients.
 - Develop and create POC solutions for new research work related to computer vision work.

- **Sr. Software Engineer | Kritikal Solutions, Noida** **[Dec-2020 - Feb-2021]**
 - Create POC for defense related projects based on GIS satellite images.
 - Super Resolution of images for better quality.
 - Object detection and Object Tracking using drone images/videos.
- **Assistant Manager | HFCL, Delhi** **[Feb-2016 - Nov-2020]**
 - Create video analytics based solutions for cctv cameras. Customize solutions for smart city projects.
 - Create deployment plans for video analytics solutions and deploy solutions on embedded devices and edge devices.
 - Create solutions to improve image quality.
- **Software Engineer | Aglaya, Delhi** **[May-2015 - Jan-2016]**
 - Develop code and bug fixing for softwares.
 - Code optimization for increasing efficiency.

Projects

- **Reverse Image Search Engine**
 - **Client : Leading Video analytics service provider in Europe**
 - **Role : Solution Architect / Computer Vision Engineer**
 - **Period : 1-May-2023 to 10-June-2023**
 - **Team Size : 2 Member**
 - **Environment : Python, Pytorch, Flask, Linux**
 - **Application**
 - Object of this module was to detect and identify similar images from a given images database. Images in database can be in 100K or more. I have to design a solution such a way that no
- **Customer Walkins Counts**
 - **Client : Leading EV brand**
 - **Role : Team Lead**
 - **Period : Apr – 2023 - Apr - 2023**
 - **Team size : 2 Members**
 - **Environment : Python, OpenVino, Streamlit, Linux, object detection, object classification, similarity matching**
 - **Application**
 - This project was designed to calculate the unique customers visited the showroom. Along with unique walkin we need to identify gender of persons walking into the showroom. Generate report at end of the day to check footfall of customers.

- **Face Super Resolution**

- **Client :** Leading Player of video meeting software in Europe
- **Role :** Team Lead
- **Period :** Nov-2022 - Jan-2023
- **Team size:** 3 Members
- **Environment :** Python, Linux, Google cloud, super resolution, object detection
- **Application**
 - This project was designed to identify the emotions of the members in the meeting. Due to poor video quality or persons far from camera facial features are distorted to overcome this we implemented Super Resolution GAN. Using very low face images 32X32 created a high resolution image (128X128) without much distortion in facial features. Customized SRGAN for facial features retention.

- **Super Resolution for Satellite Images**

- **Client:** Indian Airforce
- **Role :** Individual Contributor
- **Period :** Dec-2021 - Jan-2022
- **Team Size :** 1 Member
- **Environment :** Python, Linux, Streamlit, AWS cloud, Object Detection, Super Resolution, Similarity detection
- **Application**
 - This project is a POC for the Indian Air Force to create the high resolution images from multiple low resolution images. Using a low resolution image we produced a high resolution image with which it was easy to identify the terrain, buildings, movements etc.

- **Video Analytics Solution**

- **Client :** HFCL (Product)
- **Role :** Software Engineer
- **Period :** Oct-2020 - Sep-2021
- **Team size :** 4 Members
- **Environment :** C/C++, Python, Linux, C#, MS-SQL, Object Detection, Similarity Matching, Object Classification
- **Application**
 - This solution was developed for multiple use cases, it was developed as a platform using which we can apply multiple video analytics use cases to the camera streams. We developed this platform for using multiple

analytics on the same camera feed. Some use cases were like line crossing detection, ANPR, RLVD, Face Recognition, Loitering, Fallen Person Detection, etc. This solution was developed specially for Security and Surveillance. It was a distributed application which can be deployed to multiple locations.

- **Face Recognition**

- **Client: HFCL (Product)**
- **Period: Jan -2020 - April - 2020**
- **Team Size : 2 Members**
- **Environment : C/C++, Python, Linux, Object Detection, Similarity matching**
- **Application**
 - Face Recognition solution was developed to identify faces on cctv streams. For developing this solution we utilized multiple deep learning based networks. We use clustering based on similarity to identify the closest match to the face. Clustering was done on the bases of face embeddings.

Education

- B.Tech (CSE) 2010-2014, Skyline Institute of Engineering & Technology, Greater Noida.