AKIL AHMED SIDDIQUE

Portfolio Mompukosh

Technical Stack

♦ Python, JavaScript PyTorch, Tensorflow, Scikit-Learn

... OpenCV, Pydicom, Nibabel

m Numpy, Pandas

Nodejs, MongoDB, SQL, Flask

DSA, OOP, System Design

Html, CSS, React GCP, AWS, Azure, Docker

P Github, Bitbucket

Experience

Personal Projects

Medical Al | Computer Vision | NLP | Python, PyTorch, FastAPI, OpenCV, Numpy, Pydicom, Nibabel

- Developing UNet, and UNet3D models to segment Brain, Lung and Liver Tumours with 95% accuracy.
- Built ensemble models for diagnosing Pneumonia and Congenital Heart Disease with 90% accuracy.
- Creating a medical chatbot with HuggingFace BERT, utilizing real-world doctor-patient conversations.

Football Analysis | Computer Vision | Python | PyTorch | OpenCV | Numpy | Pandas

- Engineered a system with PyTorch, YOLO, KNN to track players, ball. Segregates teams with 99% accuracy.
- Measured player speed with a moving camera using Perspective Transform algorithms.
- Analyzed player activity and ball control during games using OpenCV and PyTorch.

Company Projects

<u>Visionify</u>, Hyderabad — *Sr. Computer Vision Engineer* (Employee of the year, 87% salary increase) March 2022 - November 2023

Workplace Monitoring | Python, JavaScript, PyTorch, FastAPI, SQLalchemy, InfluxDB, OpenCV, Numpy, Nodejs, Expressis, Azure, Docker, Linux, YOLOv5, StrongSort, U-Net

- Developed a workplace monitoring system that led to securing investment from TechStars 23.
- Achieved 93-98% accuracy for multiple Object Detection, Re-identification and Segmentation models for detecting PPE, Slips/Falls, Fires/Smokes, and Suspicious Activities.
- Created a GPT-3 API chatbot to assist clients with FAQs and software guidance.
- Deployed the system for clients (Adani, Novotel, GreenPark), supporting 100 cameras simultaneously with Python Multithreading and Multiprocessing.

3D Body Measurement | Python, PyTorch, PyTorch3D, FlaskAPI, Numpy, Pandas, Docker

- Led a team to create a 3D Body Measurement system with 97% accuracy, reducing product returns by 20%, implementing research papers.
- Deployed the system on AWS Infrastructure, Improved client relationships through regularly clear communication and detailed presentations on project milestones and delivered the project before schedule.

Brick Quality Detection | Python, PyTorch, Numpy

• Developed a system for detecting brick quality with 98% accuracy and deployed it to the client's (General Shale) system.

Attributics, Pune — *Al Engineer* (Promoted to Team Lead in 6 months)

February 2021 - March 2022

Cricket Analysis System | Python, JavaScript, Tensorflow, Keras, Nodejs, ExpressJS, MongoDB, React Native, GCP, Linux

 Led a multidisciplinary team to develop a system for analyzing cricket videos to calculated key metrics such as batsman's body angles, ball speed, pitch map, bounce, and deflection points.

<u>Idevia</u>, Kolkata — *Backend Engineer* (Employee of the quarter)

November 2019 - February 2021

• Built platforms for Booking Tours and Travels as well as for Real-Estate transactions using Node.is. Express. S and MongoDB by implementing advanced search feature and payment method using Stripe API.

Certifications

Data Structures and Algorithms) | System Design | Deep Learning Specialization | Azure Al Fundamentals

Languages

English, Hindi, Bengali