

Experience

Senior Machine Learning Engineer

Optisol Business Solutions , Coimbatore

- Leading the Computer Vision team. Undertaking responsibilities like Requirement elicitation, R&D, building Proof of Concepts etc.
- Providing solutions using Computer Vision for various use cases, mainly in the industrial fields such as Agriculture, Construction, etc.
- Training models for detection, segmentation, classification with the help of state-of-the-art implementations;

Machine Learning Engineer

Optisol Business Solutions , Coimbatore

- A Full Stack Machine Learning Developer worked on Object Detection, Instance and Semantic Segmentation, object dimensions calculation. Experience in CUDA, TensorFlow, Flask and Docker frameworks.
- Promoted as a Team Lead, managed client interactions, requirement elicitation and mentored fellow teammates.
- Providing vision solutions in the industrial sector using models like YOLO, SSD, and Image Processing techniques using OpenCV.

Projects

Project Title: Utility Pole Project

April/2021 - Now

Role: Project Lead

Description:

- Led a team of 12 members in a comprehensive utility pole project involving instance segmentation using MMDetection and OpenCV.
- Created a 3D pole dataset and developed a JSON file parser for data handling.
- Implemented various features including height prediction, super-resolution image generation, and blocky node creation.
- Designed and developed Python code following Object-Oriented Programming principles for seamless integration and maintenance.
- Maintained regular communication with clients, ensuring project requirements were met on time.
- Ensured project success by overseeing the delivery of milestones and updates according to schedule.

Technologies Used:

- MMDetection ,OpenCV, Python, JSON

Achievements:

- Successfully delivered a complex utility pole project meeting client specifications and deadlines.
- Enhanced team productivity through effective leadership and coordination.
- Implemented innovative features improving the accuracy and efficiency of instance segmentation and data processing tasks.

Project Title: Forklift Safety

Sep/2021 - April/2022

Description:

- Managed real-time production issues to enhance forklift safety and updated ML models and frameworks for optimised performance.
- Implemented MAC security and data encryption for code integrity.
- Developed image processing capabilities integrated with encrypted online storage.

Achievements:

- Addressed critical production issues promptly, minimising downtime.
- Enhanced ML models, improving operational efficiency.
- Implemented robust security measures for data protection.
- Integrated real-time image processing with secure online storage.

Technologies Used: OpenVino, Data Encryption, Dropbox

Skills

Technical: Machine Learning, Deep Learning, Python, Natural Language Processing, CNN, RNN, Encoder - Decoder models, Open-CV, Pandas, NumPy, Dash, SciPy, NLTK, Matplotlib, Clustering, TensorFlow, Keras, predictive modelling, Probability & Statistics, Mathematics

Database: MySQL

Deployment: AWS

Software/Tools: Docker, Kubernetes , OpenVino , Github

Education

Bachelor's of Technology in Computer Science (CGPA : 8.4)

Jamia Hamdard , New Delhi , India

2017 - 2021