
PROFESSIONAL SUMMARY

Machine Learning Engineer with a robust academic foundation and hands-on experience in AI, deep learning, and computer vision. Expertise in fine-tuning pre-trained models, optimizing performance, and deploying scalable solutions. Proficient in building high-performance ML models for image analysis, object detection, and scene understanding. Skilled in leveraging state-of-the-art tools and frameworks, delivering impactful AI-powered applications.

CORE COMPETENCIES

- **Programming Languages:** Python, SQL, C++, HTML, CSS
- **ML Frameworks:** TensorFlow, PyTorch, Keras, Scikit-learn
- **Deep Learning Expertise:** CNNs, Transformers, YOLO, RNNs
- **Computer Vision Skills:** Image Classification, Object Detection, Semantic Segmentation
- **Data Handling:** Pandas, NumPy, Data Cleaning, Feature Engineering, Augmentation
- **Visualization Tools:** Matplotlib, Seaborn, Power BI, Tableau
- **Deployment & Tools:** Google Colab, Jupyter Notebook

PROFESSIONAL EXPERIENCE

DATA ENGINEER INTERN | MORD , Hyderabad

July 2024 - Present

- Engaged in the development and deployment of ML models for AI applications.
- Contributed to the design of scalable pipelines for data preprocessing and model training.
- Collaborated with cross-functional teams to integrate AI solutions into business processes.

PROJECT INTERN | RISS Technologies, Calicut

Dec 2020 – Jun 2021

- Developed the "SHADOW" project using Python and Android, showcasing strong skills in software development and teamwork.
- Collaborated on integrating front-end and back-end systems, focusing on real-time security management.
- Technologies Used: Android, Python, PHP, Java for front-end development; MySQL, SQL Server for back-end.
- Tools and IDEs: Android Studio, JetBrains PyCharm, NetBeans, MS Visual Studio, MySQL, SQLyog.

Computer Operator | Akshaya Center, Koottilangadi

Jan 2022 – May 2022

- Delivered e-Governance services and facilitated digital literacy programs.

PROJECTS

- **Multi-Object Tracking with Ultralytics YOLO11:** Developed a multi-object tracking system using the YOLOv11 algorithm, focusing on real-time tracking of multiple objects with high accuracy. Leveraged deep learning and computer vision techniques to handle object identification, tracking, and motion prediction, effectively managing complex tracking scenarios in diverse environments.
- **Diagnosis of Sports Injury Using Computer Vision:** Developed a medical image analysis system using ML to detect sports injuries from X-rays, MRIs, and CT scans, integrating OpenAI API and YOLO algorithm for object detection. Tools: Google Colab, Google Drive, Python, Streamlit.

- **SHADOW:** Developed a security management system with user authentication and content display, integrating mobile API for user actions. Tools: Android Studio, JetBrains PyCharm, SQLyog, Python, PHP, Java, MySQL, HTML, CSS.
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EDUCATION

MASTER OF COMPUTER SCIENCE | PONDICHERRY UNIVERSITY | 2022 – 2024

BACHELOR OF COMPUTER SCIENCE | UNIVERSITY OF CALICUT | 2018 – 2021

CERTIFICATIONS

- DEEP NEURAL NETWORKS WITH PYTORCH | COURSERA
 - CNN-BASED IMAGE CLASSIFICATION | UDEMY
 - TENSORFLOW: NEURAL NETWORKS AND WORKING WITH TABLES | LINKEDIN LEARNING
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