

Machine Learning / AI Engineer Intern (0-1 Years Experience)

Location: Hyderabad/Onsite

Duration: 6 Months (after 6 months Full-time Offer)

Kuppismart Solutions (Livestockify) is an innovative Agri-tech startup revolutionizing livestock and aquaculture management through IoT and AI. We are looking for a junior ML / AI Engineer (0-1 years of experience) to join our core team to build, experiment, and deploy models that solve high-impact, real-world problems.

If you are strong in ML fundamentals, hungry to learn, and excited to work with real data from farms and sensors, this role is for you.

What You'll Work On (Key Projects)

You will contribute directly to the development of our end-to-end ML product suite, focusing on:

A) Computer Vision:

1. Implementing image hashing, embeddings, and similarity search to detect fraudulent re-use of carcass images.
2. Building robust data pipelines for multi-angle images.

B) Tracking & Counting Models:

1. Training and fine-tuning object detection/tracking models (e.g., YOLO, SORT/DeepSORT) on CCTV feeds.
2. Using computer vision from video frames.

C) Vocalizations (Audio ML):

1. Applying basic audio preprocessing (MFCCs, spectrograms).
2. Developing simple classifiers and deep models to identify health or distress signals from poultry sounds.

Edge/Near-Real-Time Inference:

Optimizing models for deployment on limited hardware for real-time analysis.

Key Responsibilities:

- 1.Data Engineering:** Build and maintain robust data pipelines for images, video, and audio, including cleaning, augmenting, and organizing datasets using Python.
- 2.Model Development:** Train, fine-tune, and evaluate CV models (detection/tracking/similarity) and basic audio classification models.
- 3.Implementation:** Implement baseline and production-ready models using PyTorch or TensorFlow/Keras and standard libraries (e.g., OpenCV, librosa).
- 4.Deployment Support:** Work with the engineering team to expose models as APIs (FastAPI/Flask) and support integration into internal dashboards/apps.
- 5.Research & Experimentation:** Contribute to experiments, test different architectures, log results, and write clean, maintainable code with Git.

Required Skills (Must-Have):

- 1.Strong programming skills in Python.
- 2.Solid understanding of ML fundamentals: Supervised learning, overfitting/underfitting, train/validation/test splits, and basic statistics.
- 3.Hands-on experience (projects/internships) with at least one deep learning framework: PyTorch or TensorFlow/Keras.

Practical experience in at least one of:

- 1.Computer Vision (image classification, detection, segmentation).
- 2.Audio/Signal Processing (spectrograms, basic classification).
- 3.Familiarity with data manipulation libraries (Numpy, Pandas) and visualization (Matplotlib/Plotly).
- 4.Ability to work with real-world, imperfect data and implement simplified versions of concepts from research papers.

Good-to-Have Skills (Bonus):

- 1.Experience with advanced CV models (YOLO, Faster R-CNN) or tracking algorithms (SORT/DeepSORT).
- 2.Exposure to image similarity/metric learning.
- 3.Experience with model deployment (FastAPI, Docker) or basic cloud services (AWS/GCP/Azure).
- 4.Prior work in Agri-tech, livestock, or real-world sensor applications.

What We Offer:

- 1.An opportunity to work on real-world, high-impact problems in the future of agriculture.
- 2.Direct mentorship from the founding team and senior engineers.
- 3.A culture that prioritizes learning speed and shipping practical, effective solutions.

This role is perfect for a fresh graduate or an individual with 0-1 years of experience who has strong project work, a high level of curiosity, and thrives in an end-to-end building environment.