#### CS 498 User Stories

# Milin Shah

#### 1. Downtime Tracker:

As a Production Line Manager, I want to know how often do vision systems go "offline" or fail to work so that I can better understand possible downtimes that may arise due to the integration of such a system.

#### 2. Result Verification:

As an individual who assures quality for packaging, I want to know how vision systems actively improve upon the classification of false positives or false negatives so that systems, if not accurate at the beginning, can still learn to get better overtime.

## Prahar Chokshi

## 1. Label Accuracy:

As a Packaging Quality Inspector at Valvoline, I need to ensure that labels on bottles are straight, correct, and placed at the correct height so that the packaging meets Valvoline's quality standards for appearance and accurate identification.

# 2. Image Clarity:

As a Camera System Technician at Valvoline, I want the vision system to provide clear, detailed images of product containers, so that defects can be easily detected and corrective actions can be taken in a timely manner.

#### Nishan Budhathoki

#### 1. Live Defect Detection:

As a Quality Control Engineer, I want to leverage vision systems for real-time defect detection so that I can reduce human error and improve the overall efficiency of the manufacturing process.

## 2. Research Potential Improvements:

As Head of Engineering, I want to explore future advancements in vision systems for defect detection so that I can propose innovative solutions to enhance quality of the products at Valvoline.

## Noble Eleazu

## 1. Training Mode:

As a Training Operator, I want the vision system to be equipped with a training mode to test out errors, so that new operators can practice using the system without affecting ongoing productions.

## 2. Data Visualization:

As a Data Analyst, I want the vision system to be able to generate charts and graphs that categorize types of defects, so that I can present data insights to the production team for improvements.

#### Jonathan Stefanski

## 1. Continuous Model Training:

As a Systems Engineer, I want to be able to continuously add data to train the vision system model in order to keep progressively improving it over time.

## 2. Portability:

As a Plant Manager, I want the system to be easily integrated into manufacturing plants in order to increase quality across multiple plants.

## Jonathan Hall

## 1. Detect Leakers:

As a Quality Engineer, I want to be able to detect tears or holes in product containers using a vision system to reduce the cost of product loss and repackaging.

# 2. Ensure Readability:

As a Quality Assurance Specialist, I want to have an automated vison system to detect smudges, foreign substances, or anything tarnishing the visibility of information on the container.