

### Greetings from ResoluteAl.in!

Thank you for your interest in our internship opening. As a next step in the screening process, you are required to complete the below mentioned assignment.

**Role: Machine Learning Engineer Intern** 

Duration: 72 hrs.

# Choose any one from below options.

**Option 1**: Computer Vision

**Complexity: Easy** 

Task1:

Process any given image/pdf and read the text. Using open- CV approach and Py-tesseract only.

### User story:

As a user I should be able to process images and extract the text from the image. (You are free to use open-source models and codes, but please ensure that there is no complete copy-paste done)

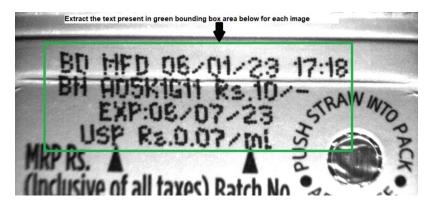
Data is provided check the data folder under task1 folder

**Option 2**: Computer Vision

**Complexity: Intermediate** 

### Task2:

Read the text as shown in the given image, make sure the code is generalize and work on all the given images in task2 Folder .



#### User story:

As a user I should provide a path to the image, and the program should display the **text** present in the image. (you are free to use open-source models and codes, but please ensure that there is no complete copy-paste done)

Data is provided check the data folder under task2 folder

**Option 3**: Computer Vision

**Complexity: Intermediate** 

Task3:

Count the number of items in the given freezer images.

Tip: Detect & Locate all the compartments of the Refrigerator using computer-vison techniques, and then count.

#### **User story:**

As a user I should provide a path to the image, and the program should count and display the information about the number of items in the image. (you are free to use open-source models and codes, but please ensure that there is no complete copy paste done)

Data is provided check the data folder under task3 folder

**Option 4**: Computer Vision

**Complexity: Hard** 

Task:

Fabric defect should be detected using segmentation approach and localize the defect. Use the given dataset for fabric defect detection (unsupervised anomaly detection)

#### **User story:**

As a user I should provide a path of the Fabric image, the program should detect the defect and localize it and mask the defective region. (you are free to use open-source models and codes, but please ensure that there is no complete copy paste done)

Data is provided check the data folder under task4 folder

## **Submission:**

- \* Send a screen recorded video of the user story or upload into your google drive and share link (please ensure to rename the video to your full name before sending it)
- \* Once approved we will ask for the code
- \* Please zip the video before sending
- \* Rename structure: TASKNUMBER\_FULLNAME

### **Deadline:**

72 hours after receival of Assignment.

Note: Approach will be given More Value in assessment.