



Greetings from ResoluteAI.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: 48 hrs.

Choose any one from below options.

Option 1: Computer Vision

Complexity: Easy

Task:

Count the number of boxes in the given image.

User story:

As a user I should provide a path to the image, and the program should display the total number of boxes 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)

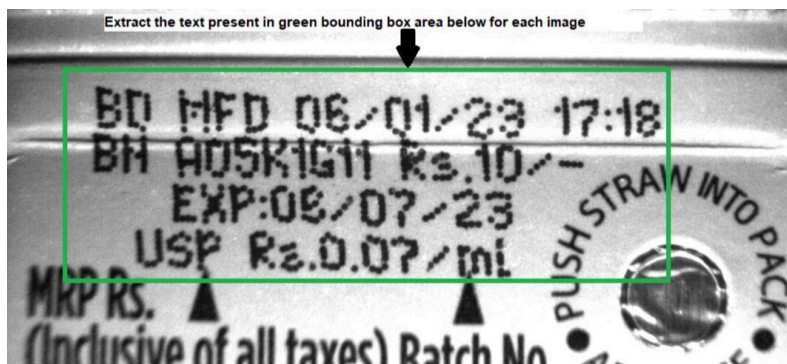
Data is provided check the data folder Task1 data

Option 2: Computer Vision

Complexity: Intermediate

Task2:

Read the text as shown in the given image, make sure the code is generalized and work on all the given images in task2 Folder(correct extraction will only be evaluated) .



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 (products) in the given freezer images **compartment wise**.

Tip: Detect & Locate all the compartments of the Refrigerator using computer-vision 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/product in the image compartment. (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 defects should be detected using a segmentation approach and localize the defect. Use the given dataset for fabric defect 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

Option 5: Computer Vision

Complexity: Hard

Task:

Detect all the different parts of the clothing, such as sleeves, collar area, neck area, and chest area, in the given dataset for task5.

User story:

As a user, I should be able to provide the path of a clothing image. The program should then detect and localize different areas of the clothing, such as sleeves, collar area, neck area, and chest area, by either outlining or masking these regions 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 task5 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:

48 hours after receipt of Assignment.

Note: Approach will be given More Value in assessment.