There are two versions of the GUI interface, namely version 1 and version 2：

Please use the program according to the following instructions.

1. Install Python (version 3.7 or higher recommended)

2. Install the following Python packages:

- opencv-python

- numpy

- ultralytics

- tkinter (usually comes with Python)

- Pillow

- xarm (Ufactory xArm SDK)

You can install these using the following command:

```

pip install opencv-python numpy ultralytics pillow xarm

```

3. Ensure the xArm robotic arm is properly connected and you know its IP address

The IP address is on the instruction manual inside the packaging box

4. Prepare the required image files and update their paths in the code

5. Prepare the YOLO model weight file and update its path in the Yolo code

Usage Procedure:

1. Run the Versions 1 or 2 program:

- Open a command prompt and navigate to the program folder

- Run the command: `python Version\_1 or 2.py`

2. In the GUI that appears:

- Click the "Sunny Side" button to make a sunny-side-up egg

- Click the "Omelette" button to make an omelette

- In the ingredient selection window that pops up, choose the desired ingredients

- Click "Confirm" to confirm your selection

3. The program will control the robotic arm to start making the egg

4. During the process, the robotic arm will automatically execute the corresponding movements

5. After cooking, the program will automatically initiate machine vision detection

6. The detection result will determine subsequent actions (normal placement or discard)

7. After the entire process, the robotic arm will return to its initial position

8. To stop the program, you can close the GUI window or press emergency stop button in Ufactory studio interface

Important Notes:

- Ensure there is sufficient safe space around the robotic arm

- Carefully check all device connections before use

- In case of any anomaly, use the emergency stop button