

Fruit recognition based on OpenCV

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Project description:

Contemporary multimedia devices have the sensors to monitor human beings' appearance and behavior, and this makes our live easier and more convenient. For example, to unlock a cell phone screen, we can press the button, swipe the screen, moreover, scan our fingerprint, or scan our face. The last method uses a face recognition mechanism. It consists of face detection, character extraction, and database searching, and comparison. In my project, I want to recognize some fruits from the others, which has a smaller database. It can be seen that on the OpenCV website, the video or picture recognition is based on face recognition, so it is the foundation of my thought.

Deliverable:

The application will be run under the Developer's SIS test bed to select and fine-tune its algorithm.

- MS2: Face recognition complete. Fruit recognition with a coarse-grained algorithm.
- Demo: Fruit recognition with a fine-grained algorithm, which I prefer Gabor transformation and K-nearest neighbor algorithm.
- Plan B: Fruit recognition with a coarse-grained algorithm.