

Abstract

The paper mainly use matlab to do image processing. The main part contains threshold, image binarization, find the coordinates, the angle of rotation, finally alignment pattern and answers.

First, we converted into a digital image matrix, reuse threshold to be classified as a digital matrix 0 and 1(black and white) . find four peripheral blocks of black area, then calculated in the black area in the center of gravity, and then forming a marker, we can calculate the slope between markers. The slope calculated, then the rotation angle can be calculated. With the rotation angle can be learned after the original test, put a few degrees askew crooked photos. Know how much picture rotation angle back, that will be able to straighten the picture.

Finally, insert to determine the location of the black circle, use black circles to find the answer in the answer position. Next, determine the location of the actual position and the correct answer whether the same answers. Experimental results show that if the same position, you can score; if different is not scoring.