

CSC420

Assignment 3

By: Ou Ye 999768327

**1** Run sift algorithm on shoe.jpg and on 5dollar.jpg (An actual 5 dollar image) to determine all the interest points, match and extract the 5 dollar out of shoe.jpg and called it extractedMoney.jpg. Alternative, you could manually draw the box around the money and shoe to extract it out. Then perform projection transformation on the 5dollar.jpg and extractedMoney.jpg, since the size of the actual 5 dollar is already known from Wikipedia, we can find the ratio of mm / pixel through the projection transformation from using the extractedMoney.jpg.

Last step, is to extract the shoe out of the image manually, and multiple the width and high with the mm / pixel ratio that we computed earlier to determine the size of the shoe.

**2**

**(a)**