CSCI3290 Assignment 1

Image Alignment

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Codes contained:

Matlab Script File:

1. imgAlignSingle.m

Image data chosen:

'00016v.jpg','00069v.jpg','00018v.jpg','00026v.jpg','00066v.jpg','00054v.jpg','00037v.jpg'

This script code will loop over the chosen small-size image and align them using single-scale algorithm and perform auto-cropping on the aligned image.

Output for each input image:

* directly aligned image
* single-scale aligned image
* edge-detected image
* border-labeled image
* auto-cropped image

1. imgAlignMulti.m

Image data chosen:

'00026u.tif','00789u.tif','01087u.tif','00028u.tif','00029u.tif','00063u.tif','00064u.tif','00066u.tif'

This script will loop over the chosen large-size image and align them using multiple-scale algorithm.

Output for each input image

* directly aligned image
* multiple-scale aligned image

Matlab function file:

1. alignSingle.m
2. alignMulti.m
3. border\_detection.m

These functions will be called by the two script file to perform the alignment and cropping tasks.

Corresponding image data are also contained in the code folder. (tif image is compressed into jpeg to reduce the file size)