**********Default**********

Using pgm files vs bin files
to perform lifting step & Klt Feature Detection
06/19/22

**********Default**********

Testing two images l64.pg & img1.pgm

l64.pgm The 64 x 64 images zoomed in.

openocd -f interface/raspberrypi-swd.cfg -f target/rp2040.cfg -c "program test-read-crc16/test-read-crc16.elf verify reset exit"

~~Not correct~~
~~Feature #0: (30.000000,28.000000) with value of 13516~~
~~Feature #1: (33.000000,38.000000) with value of 5855~~
~~Feature #2: (-1.000000,-1.000000) with value of -1~~
~~Feature #3: (-1.000000,-1.000000) with value of -1~~

Feature #0: (32.000000,24.000000) with value of 4472
Feature #1: (39.000000,34.000000) with value of 3461
Feature #2: (29.000000,36.000000) with value of 3100
Feature #3: (-1.000000,-1.000000) with value of -1
openocd -f interface/raspberrypi-swd.cfg -f target/rp2040.cfg -c "program test-read/test-read.elf verify reset exit"

Using a64.bin

Feature #0: (24.000000,32.000000) with value of 4472
Feature #1: (34.000000,39.000000) with value of 3461
Feature #2: (36.000000,29.000000) with value of 3100
Feature #3: (-1.000000,-1.000000) with value of -1
Feature #4: (-1.000000,-1.000000) with value of -1
Feel free to place comments here.

!!!
!!! Warning: This is a KLT data file. Do not modify below this line !!!

KLT Feature List
---

nFeatures = 100

feature | (x,y)=val
---+---
0 | (32, 24)= 4472
1 | (39, 34)= 3461
2 | (29, 36)= 3100
3 | (-1, -1)= -1
4 | (-1, -1)= -1
5 | (-1, -1)= -1

PCA l64.pgm The 64 x 64 images zoomed in.

img1.pgm The 64 x 64 images zoomed in.

openocd -f interface/raspberrypi-swd.cfg -f target/rp2040.cfg -c "program test-read-crc16/test-read-crc16.elf verify reset exit"

~~Not correct~~
~~Feature #0: (30.000000,28.000000) with value of 13516~~
~~Feature #1: (33.000000,38.000000) with value of 5855~~
~~Feature #2: (-1.000000,-1.000000) with value of -1~~
~~Feature #3: (-1.000000,-1.000000) with value of -1~~
~~Feature #4: (-1.000000,-1.000000) with value of -1~~

Feature #0: (37.000000,29.000000) with value of 19844
Feature #1: (28.000000,39.000000) with value of 9270
Feature #2: (24.000000,29.000000) with value of 4393
Feature #3: (38.000000,39.000000) with value of 465
Feature #4: (-1.000000,-1.000000) with value of -1
Feature #5: (-1.000000,-1.000000) with value of -1

openocd -f interface/raspberrypi-swd.cfg -f target/rp2040.cfg -c "program test-read/test-read.elf verify reset exit"
Using bb.bin

Feature #0: (37.000000,29.000000) with value of 19844
Feature #1: (28.000000,39.000000) with value of 9270

Feature #2: (24.000000,29.000000) with value of 4393
Feature #3: (38.000000,39.000000) with value of 465
Feature #4: (-1.000000,-1.000000) with value of -1
Feature #5: (-1.000000,-1.000000) with value of -1

Feel free to place comments here.

!!!
!!! Warning: This is a KLT data file. Do not modify below this line !!!

KLT Feature List
---

nFeatures = 100

feature | (x,y)=val
---+---
0 | (37, 29)=19844
1 | (28, 39)= 9270
2 | (24, 29)= 4393
3 | (38, 39)= 465
4 | (-1, -1)=   -1
5 | (-1, -1)=   -1
6 | (-1, -1)=   -1
7 | (-1, -1)=   -1
8 | (-1, -1)=   -1
9 | (-1, -1)=   -1

PCA img1.pgm The 64 x 64 images zoomed in.