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1. Five fundamental matrices F(0) for every stereo image pair:
pair1
```
-0.000000787744424  -0.000048022602216   0.025288948627293
 0.000047774567379  -0.000001234803018  -0.026513018254733
-0.024477843217295   0.028823955241351  -0.998612807421021
```

pair2
```
-0.000000086363253   0.000174030139412  -0.010270680623095
-0.000176869667486   0.000013562417364   0.423704910070369
 0.010508262512892  -0.432133572311356   0.795938912636340
```

pair3
```
-0.000000172788298  -0.000085497604530   0.019707446241981
 0.000089507275154   0.000001038542350   0.104703602607873
-0.020769552032172  -0.108814900677869   0.988117756109990
```

pair4
```
 0.000003550277559  -0.000090106174534   0.065181362330388
 0.000086752995733   0.000001725178573  -0.013048113830254
-0.073287976888042   0.012303186509019   0.995016896899149
```

pair5
```
-0.000000028259560  -0.000020487725915   0.013803934592525
 0.000020604969621  -0.000000094425191  -0.008628990166559
-0.013878364064138   0.010182269169415  -0.999719312347028
```

2. Five fundamental matrices F(1) for every stereo image pair
pair1
```
-0.000001039105639  -0.000030389492190   0.021756648967164
 0.000030395327902  -0.000001444924094  -0.014742081175853
-0.020587967956313   0.016711416115005  -0.999302847771696
```

pair2
```
-0.000000063189664   0.000152926942409  -0.013419835521814
-0.000154813585732   0.000012204075967   0.328791717908527
 0.013594462690061  -0.336766935816228   0.882110587325418
```

pair3
```
-0.000000671193844  -0.000072284840871   0.016526951821803
 0.000076813296530   0.000004031379861   0.073659781405264
-0.018127755635774  -0.078279126193077   0.993903842531385
```

pair4
```
-0.000003841863034   0.000089701888960  -0.064004812243264
-0.000086684680548  -0.000001989053190   0.014607015185690
 0.072298902074041  -0.013878817004294  -0.995123233943983
```

pair5
```
-0.000000015812317  -0.000018179185262   0.013766537045916
 0.000018265993388  -0.000000066988161  -0.008150085256017
-0.013832001661113   0.009525716949143  -0.999730960984304
```

3. Five figures of the stereo image pairs
pair1

magenta point ->
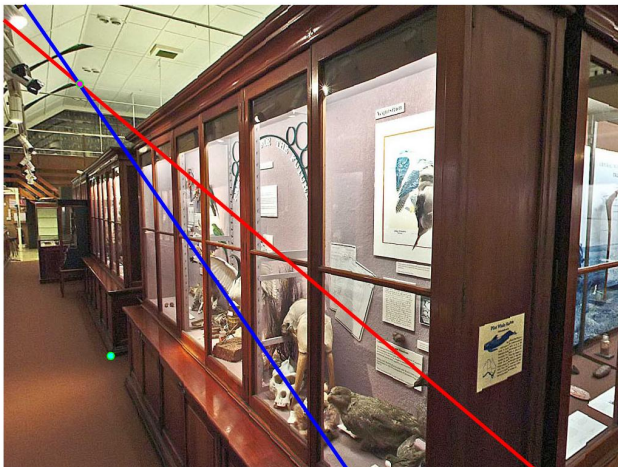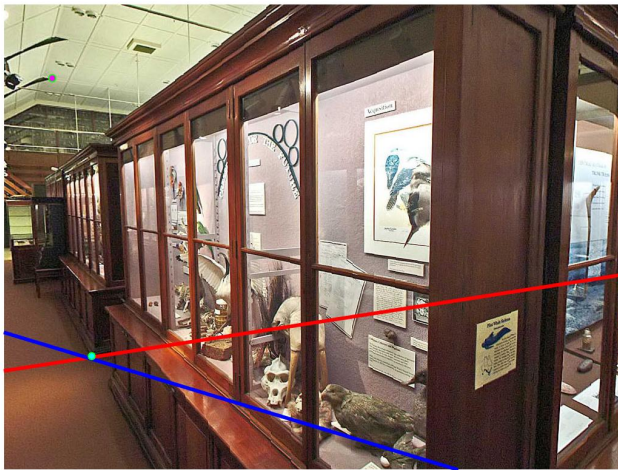selected point in image1 -> [81,123]
mapped point in image2 -> [126,131]

cyan point ->
selected point in image2 -> [177,579]
mapped point in image1 -> [146,581]

red line -> F(0)
blue line -> F(1)

epipolar line for F0 in image2 (line(x,y) function in Matlab)
vector x:
1.000000
1026.000000
vector y:
25.590817
894.254213

epipolar line for F1 in image2 (line(x,y) function in Matlab)
vector x:
1.000000
1026.000000
vector y:
-47.640049
1427.978435

epipolar line for F0 in image1 (line(x,y) function in Matlab)
vector x:
1.000000
1026.000000
vector y:
605.357745
446.231581

epipolar line for F1 in image1 (line(x,y) function in Matlab)
vector x:
1.000000
1026.000000
vector y:
541.852816
851.719576

=> epipolar lines pass through the right points

pair2

magenta point ->
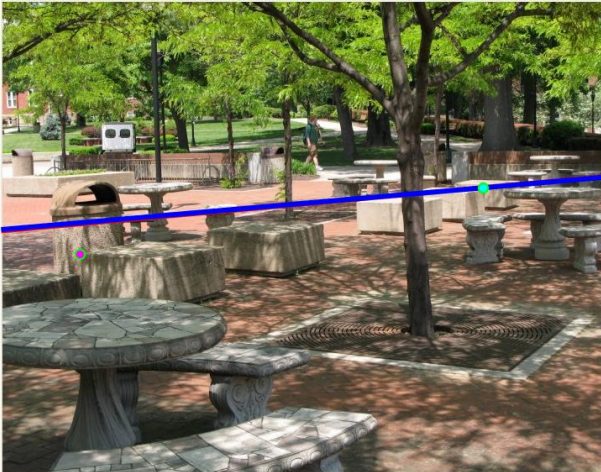selected point in image1 -> [95,303]
mapped point in image2 -> [118,302]

cyan point ->
selected point in image2 -> [605,223]
mapped point in image1 -> [575,224]

red line -> F(0)
blue line -> F(1)

epipolar line for F0 in image2 (line(x,y) function in Matlab)
vector x:
1.000000
721.000000
vector y:
314.102482
239.735700

epipolar line for F1 in image2 (line(x,y) function in Matlab)
vector x:
1.000000
721.000000
vector y:
314.158145
239.591560

epipolar line for F0 in image1 (line(x,y) function in Matlab)
vector x:
1.000000
721.000000
vector y:
274.964899
210.516114

epipolar line for F1 in image1 (line(x,y) function in Matlab)
vector x:
1.000000
721.000000
vector y:
273.523644
211.019121

=> epipolar lines pass through the right points

pair3

magenta point ->
selected point in image1 -> [135,50]
mapped point in image2 -> [100,49]

cyan point ->
selected point in image2 -> [236,293]
mapped point in image1 -> [253,293]

red line -> F(0)
blue line -> F(1)

epipolar line for F0 in image2 (line(x,y) function in Matlab)
vector x:
1.000000
433.000000
vector y:
61.975084
5.001036

epipolar line for F1 in image2 (line(x,y) function in Matlab)
vector x:
1.000000
433.000000
vector y:
63.568854
-2.192410

epipolar line for F0 in image1 (line(x,y) function in Matlab)
vector x:
1.000000
433.000000
vector y:
282.253465
300.432390

epipolar line for F1 in image1 (line(x,y) function in Matlab)
vector x:
1.000000
433.000000
vector y:
281.240451
300.602759

=> epipolar lines pass through the right points

pair4

magenta point ->
selected point in image1 -> [22,152]
mapped point in image2 -> [10,163]

cyan point ->
selected point in image2 -> [539,756]
mapped point in image1 -> [448,679]

red line -> F(0)
blue line -> F(1)

epipolar line for F0 in image2 (line(x,y) function in Matlab)
vector x:
1.000000
578.000000
vector y:
119.912717
2855.148898

epipolar line for F1 in image2 (line(x,y) function in Matlab)
vector x:
1.000000
578.000000
vector y:
126.200247
2474.420300

epipolar line for F0 in image1 (line(x,y) function in Matlab)
vector x:
1.000000
578.000000
vector y:
751.079900
655.532520

epipolar line for F1 in image1 (line(x,y) function in Matlab)
vector x:
1.000000
578.000000
vector y:
741.538036
659.372355

=> epipolar lines pass through the right points

pair5

magenta point ->
selected point in image1 -> [96,236]
mapped point in image2 -> [170,239]

cyan point ->
selected point in image2 -> [1052,800]
mapped point in image1 -> [978,798]

red line -> F(0)
blue line -> F(1)

epipolar line for F0 in image2 (line(x,y) function in Matlab)
vector x:
1.000000
1375.000000
vector y:
11.979172
1858.087692

epipolar line for F1 in image2 (line(x,y) function in Matlab)
vector x:
1.000000
1375.000000
vector y:
-10.925650
2019.260225

epipolar line for F0 in image1 (line(x,y) function in Matlab)
vector x:
1.000000
1375.000000
vector y:
578.472494
887.676736

epipolar line for F1 in image1 (line(x,y) function in Matlab)
vector x:
1.000000
1375.000000
vector y:
721.414253
830.190964

=> epipolar lines pass through the right points

4. Five figures of the stereo image pairs with clearly marked epipoles
pair1

cyan point -> epipole for F(0)
magenta point -> epipole for F(1)

epipole for F0 in image1:
x: 568.330844
y: 517.282447

epipole for F0 in image2:
x: 586.793327
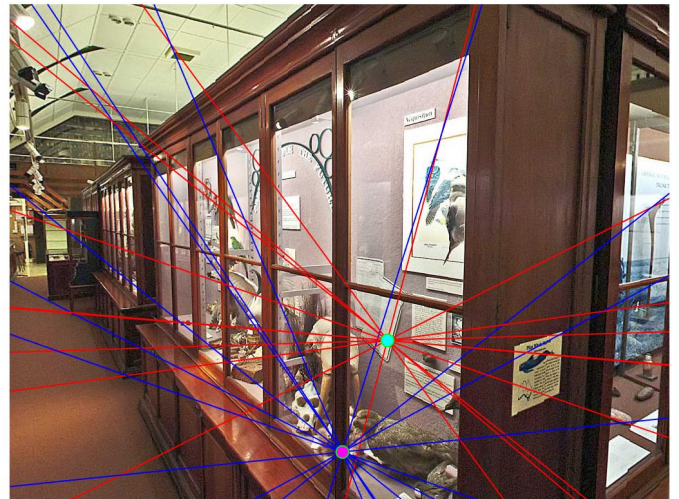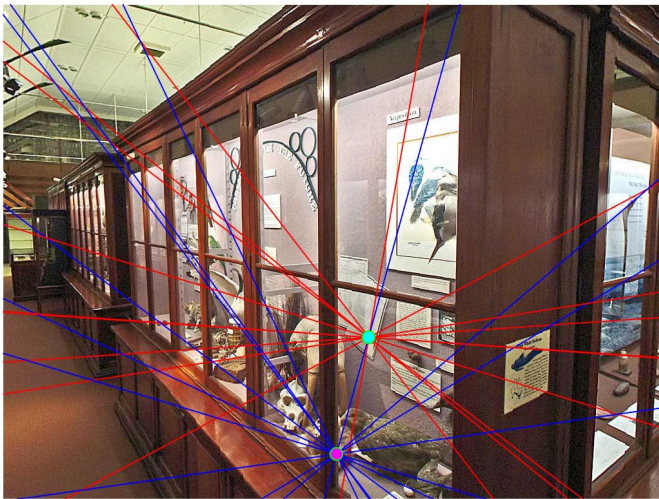y: 522.036886

epipole for F1 in image1:
x: 518.202618
y: 698.207840

epipole for F1 in image2:
x: 516.862210
y: 695.009525

pair2

cyan point: epipole for F(0)
magenta point: epipole for F(1)

epipole for F0 in image1:
x: 2400.193765
y: 60.207785

epipole for F0 in image2:
x: 2478.560387
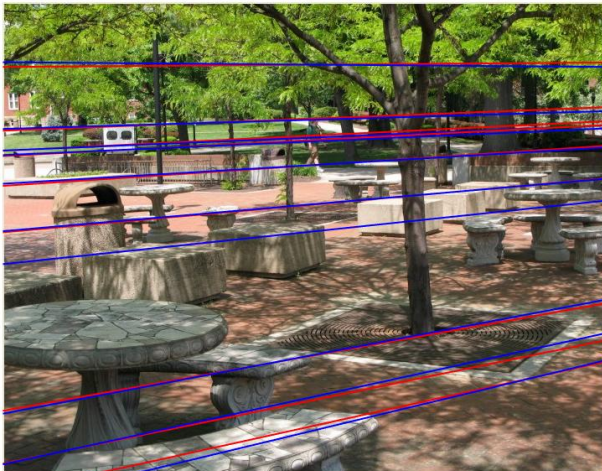y: 58.202213

epipole for F1 in image1:
x: 2130.778178
y: 88.633687

epipole for F1 in image2:
x: 2195.206439
y: 86.915811

=> epipoles are outside of the image1 and image2

pair3

cyan point: epipole for F(0)
magenta point: epipole for F(1)

epipole for F0 in image1:
x: -1172.479559
y: 232.872454

epipole for F0 in image2:
x: -1269.935697
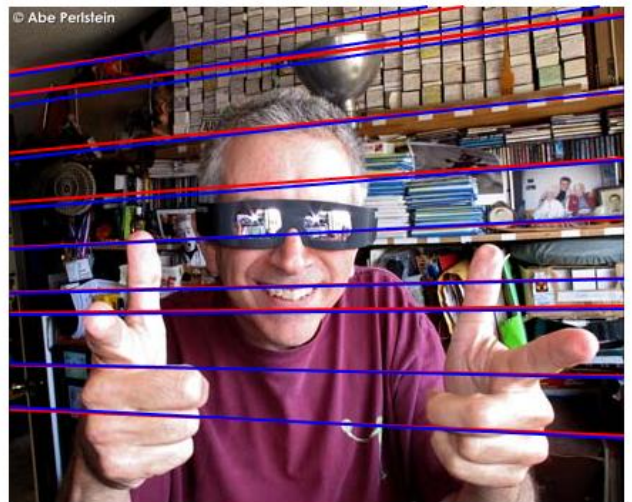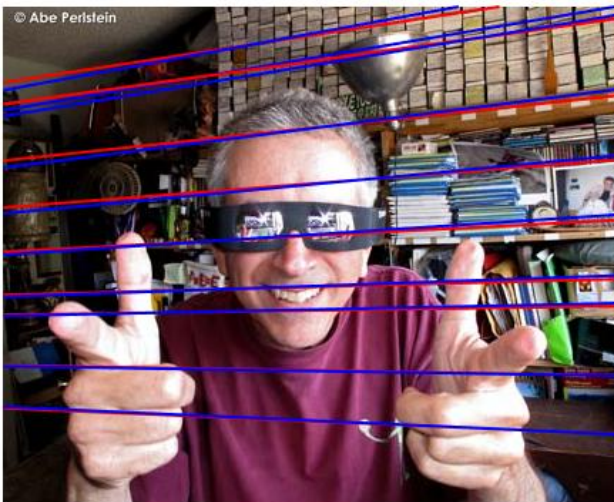y: 229.591639

epipole for F1 in image1:
x: -971.418601
y: 237.656496

epipole for F1 in image2:
x: -1070.285709
y: 226.645480

=> epipoles are outside of the image1 and image2

pair4

cyan point: epipole for F(0)
magenta point: epipole for F(1)

epipole for F0 in image1:
x: 135.913563
y: 728.739107

epipole for F0 in image2:
x: 152.595813
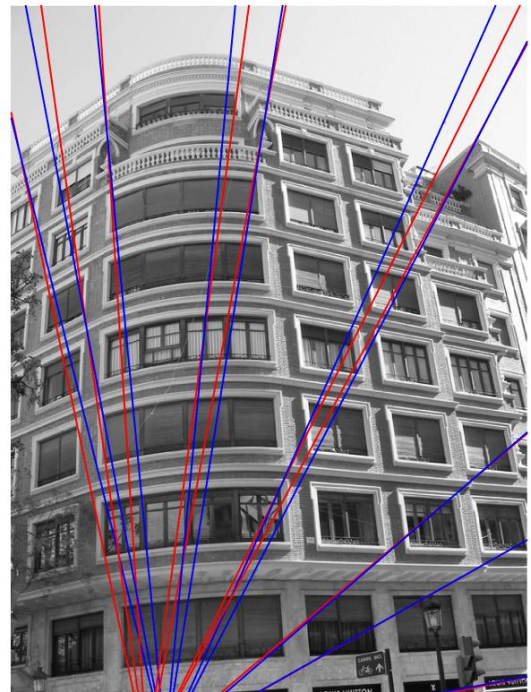y: 838.544177

epipole for F1 in image1:
x: 151.985591
y: 720.037458

epipole for F1 in image2:
x: 173.045649
y: 826.375363

=> epipoles are outside of the image2

pair5

cyan point: epipole for F(0)
magenta point: epipole for F(1)

epipole for F0 in image1:
x: 421.866951
y: 673.184173

epipole for F0 in image2:
x: 493.886226
y: 674.221866

epipole for F1 in image1:
x: 448.964751
y: 756.878687

epipole for F1 in image2:
x: 521.198256
y: 757.705465