ICP

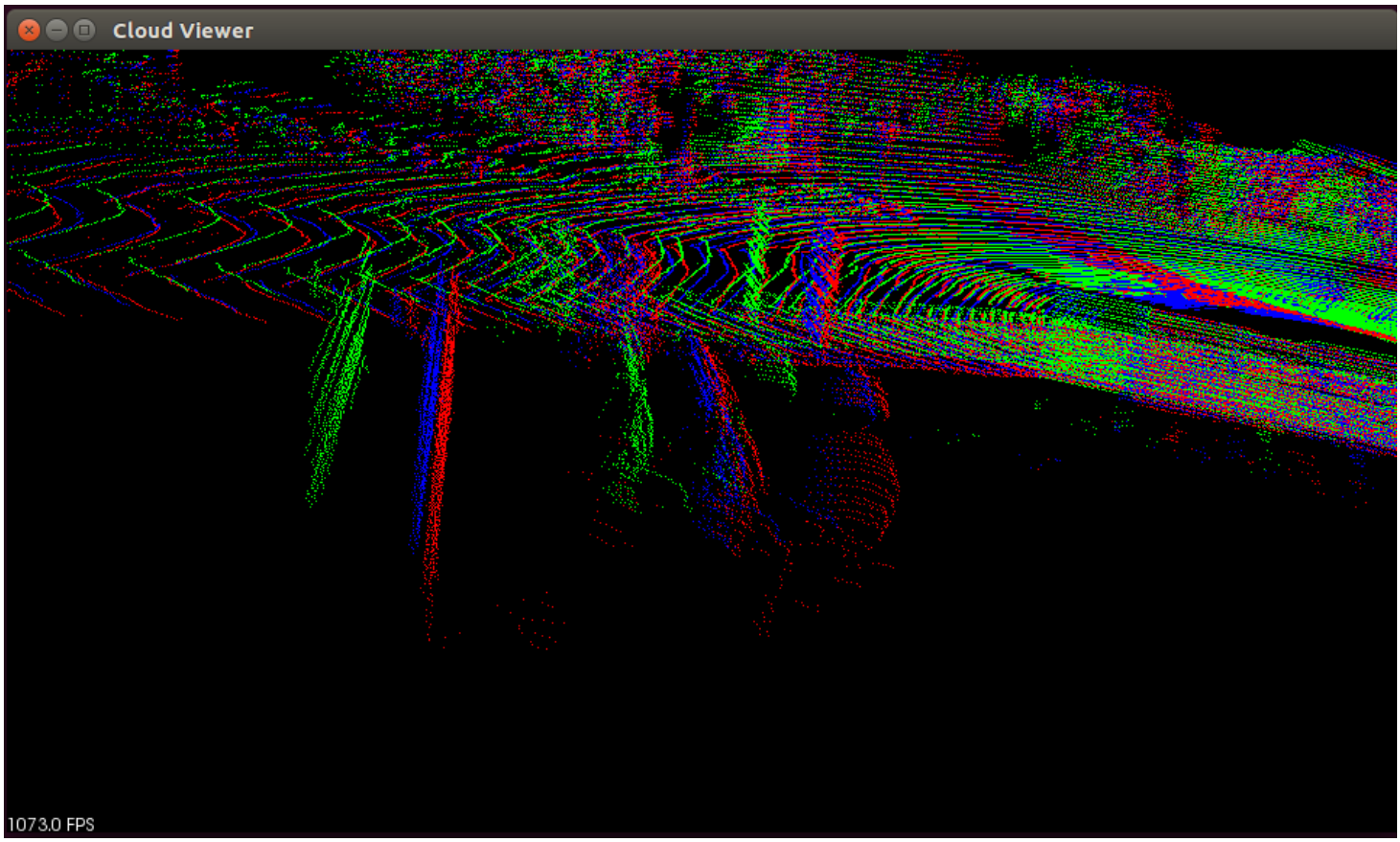
Iterative Closest Point Algorithm Implementation

tested on Ubuntu 16.04

use run.sh to compile and excute the program

```
./run.sh
```

Here is the pictures of the result:



Terminal

Terminal

```
T_ =     0.999998  -0.00218091 -0.000148386     0.102645
  0.00218081     0.999997 -0.000687224 -0.000249758
 0.000149884  0.000686899             1   0.00139572
           0             0             0            1
T_ =     0.999999  -0.00172415 -0.000201523     0.107332
  0.00172406     0.999998 -0.000443881   0.00157784
 0.000202288  0.000443533             1 -0.000937376
           0             0             0            1
T_ =     0.999999  -0.00127812 -0.000203999     0.101852
  0.00127806     0.999999 -0.000307573   0.00207844
 0.000204391  0.000307312             1  -0.00188218
           0             0             0            1
T_ =            1 -0.000917698 -0.000204988    0.0956351
 0.000917661             1 -0.000181699   0.00229532
 0.000205154  0.000181511             1  -0.00118519
           0             0             0            1
T_ =            1 -0.000618064 -0.000136569    0.0884568
 0.000618047             1 -0.000124975   0.00184013
 0.000136647  0.000124891             1 -0.000510898
           0             0             0            1
T_ =            1  -0.00037527 -0.000153574    0.0823332
 0.000375264             1 -3.88307e-05   0.00115427
 0.000153588  3.87731e-05             1  0.000225459
           0             0             0            1
T_ =            1  -0.00020059 -0.000111065    0.0755039
 0.000200589             1  -1.1811e-05    0.0013206
 0.000111068  1.17887e-05             1  0.000244032
           0             0             0            1
T_ =            1 -0.000101059 -0.000112866    0.0699227
 0.000101067             1  6.51714e-05  0.000743395
  0.00011286 -6.51828e-05             1 -4.00723e-05
           0             0             0            1
T_ =            1 -2.74366e-05 -0.000137791     0.065249
 2.74447e-05             1  5.82636e-05  0.000577816
 0.000137789 -5.82674e-05             1  0.000567974
           0             0             0            1
T_ =            1  3.67621e-05 -0.000126565    0.0593538
-3.67529e-05             1  7.23132e-05  0.000537954
 0.000126568 -7.23085e-05             1  0.000378556
           0             0             0            1
T_ =            1  3.85621e-05 -0.000124647    0.0548584
 -3.8556e-05             1  4.83331e-05  -8.4433e-05
 0.000124649 -4.83283e-05             1  0.000433591
           0             0             0            1
T_ =            1  6.02206e-05 -0.000104357    0.0488326
-6.02171e-05             1  3.32994e-05 -0.000582496
 0.000104359 -3.32931e-05             1   0.00054423
           0             0             0            1
T_ =            1  6.91868e-05 -8.04422e-05    0.0433686
-6.91854e-05             1  1.69647e-05  -0.00035382
 8.04434e-05 -1.69591e-05             1  0.000384738
           0             0             0            1
T_ =            1   4.4142e-05 -9.60701e-05    0.0385048
-4.41401e-05             1  1.96608e-05 -0.000406411
 9.60709e-05 -1.96565e-05             1  0.000313686
```

```
            0             0             0             1
T_ =            1  1.59992e-05 -5.33801e-05    0.0340093
-1.59986e-05            1  1.08395e-05 -0.000158184
 5.33803e-05 -1.08386e-05            1  0.000489843
            0             0             0             1
```