|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Detector/Descriptor | BRIEF | ORB | FREAK | AKAZE | SIFT |
| SHITOMASI |  |  |  |  |  |
| HARRIS |  |  |  |  |  |
| FAST |  |  |  |  |  |
| BRISK |  |  |  |  |  |
| ORB |  |  |  |  |  |
| AKAZE | n1-10={1351, 1327, 1311, 1351, 1360, 1347, 1363, 1331, 1358, 1331}  t1-10={43.3856 , 37.1536, 42.3687, 37.1875, 38.5395, 40.6254, 44.8535, 42.6313, 40.3799, 44.238} | AKAZE detector with n= 1351 keypoints in 46.3548 ms |  | OK |  |
| SIFT | n1-10={, , , , , , , , , }  t1-10={, , , , , , , , , } | (-215:Assertion failed) inv\_scale\_x > 0 in function 'resize' |  | (-215:Assertion failed) 0 <= kpts[i].class\_id && kpts[i].class\_id < static\_cast<int>(evolution\_.size()) in function 'Compute\_Descriptors' | OK |

PM: A few mistakes, take average time

AKAZE detector with n= 1351 keypoints in 43.3856 ms

AKAZE descriptor extraction in 34.0648 ms

AKAZE detector with n= 1327 keypoints in 37.1536 ms

AKAZE descriptor extraction in 33.3674 ms

AKAZE detector with n= 1311 keypoints in 42.3687 ms

AKAZE descriptor extraction in 35.3043 ms

AKAZE detector with n= 1351 keypoints in 37.1875 ms

AKAZE descriptor extraction in 36.2026 ms

AKAZE detector with n= 1360 keypoints in 38.5395 ms

AKAZE descriptor extraction in 35.1196 ms

AKAZE detector with n= 1347 keypoints in 40.6254 ms

AKAZE descriptor extraction in 35.252 ms

AKAZE detector with n= 1363 keypoints in 44.8535 ms

AKAZE descriptor extraction in 31.8952 ms

AKAZE detector with n= 1331 keypoints in 42.6313 ms

AKAZE descriptor extraction in 33.516 ms

AKAZE detector with n= 1358 keypoints in 40.3799 ms

AKAZE descriptor extraction in 33.9289 ms

AKAZE detector with n= 1331 keypoints in 44.238 ms

AKAZE descriptor extraction in 34.7002 ms

PM: A few mistakes, takes more time

SIFT detector with n= 1438 keypoints in 90.0997 ms

SIFT descriptor extraction in 56.3422 ms

SIFT detector with n= 1371 keypoints in 62.1136 ms

SIFT descriptor extraction in 47.7366 ms

SIFT detector with n= 1380 keypoints in 58.6886 ms

SIFT descriptor extraction in 49.4568 ms

SIFT detector with n= 1335 keypoints in 59.4514 ms

SIFT descriptor extraction in 43.9508 ms

SIFT detector with n= 1305 keypoints in 58.778 ms

SIFT descriptor extraction in 44.3206 ms

SIFT detector with n= 1369 keypoints in 53.1954 ms

SIFT descriptor extraction in 43.8114 ms

SIFT detector with n= 1396 keypoints in 58.7284 ms

SIFT descriptor extraction in 46.7006 ms

SIFT detector with n= 1382 keypoints in 53.4131 ms

SIFT descriptor extraction in 44.6001 ms

SIFT detector with n= 1463 keypoints in 54.7524 ms

SIFT descriptor extraction in 50.9965 ms

SIFT detector with n= 1422 keypoints in 53.7966 ms

SIFT descriptor extraction in 49.4505 ms

n1-10={1438, 1371, 1380, 1335, 1305, 1369, 1396, 1382, 1463, 1422}

t1-10={56.3422, 47.7366, 49.4568, 43.9508, 44.3206, 43.8114, 46.7006, 44.6001, 50.9965, 49.4505}