1欧式距离：

1网络：Resnet18

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Euclidean\_Distance\_with1 |  |  |
| 1.tif | 21.622484 | 1t.tif | 22.788614 |
| 2.tif | 19.329487 | 2t.tif | 19.73268 |
| 3.tif | 20.953363 | 3t.tif | 20.524998 |
| 4.tif | 20.726376 | 4t.tif | 20.341534 |
| 5.tif | 17.73076 | 5t.tif | 18.59663 |
| 6.tif | 20.526709 | 6t.tif | 19.379099 |
| 7.tif | 24.378576 | 7t.tif | 25.123148 |
| 8.tif | 18.965998 | 8t.tif | 18.131176 |
| 9.tif | 21.045729 | 9t.tif | 20.272533 |
| 10.tif | 16.627459 | 10t.tif | 16.233727 |

2网络：Resnet50

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Euclidean\_Distance\_with1 | filename |  |
| 1.tif | 34.42302 | 1t.tif | 34.06486 |
| 2.tif | 30.834423 | 2t.tif | 30.700762 |
| 3.tif | 29.800623 | 3t.tif | 29.690842 |
| 4.tif | 29.01194 | 4t.tif | 29.192266 |
| 5.tif | 31.495766 | 5t.tif | 31.191072 |
| 6.tif | 31.951633 | 6t.tif | 31.295921 |
| 7.tif | 33.99853 | 7t.tif | 34.704163 |
| 8.tif | 32.01399 | 8t.tif | 31.88226 |
| 9.tif | 31.68145 | 9t.tif | 31.463684 |
| 10.tif | 32.83718 | 10t.tif | 32.714928 |

3网络：Resnet152

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Euclidean\_Distance\_with1 | filename |  |
| 1.tif | 34.064983 | 1t.tif | 33.305115 |
| 2.tif | 32.071804 | 2t.tif | 31.826202 |
| 3.tif | 33.075424 | 3t.tif | 31.673662 |
| 4.tif | 30.172161 | 4t.tif | 30.388998 |
| 5.tif | 32.552425 | 5t.tif | 32.704105 |
| 6.tif | 34.006542 | 6t.tif | 32.401497 |
| 7.tif | 36.075848 | 7t.tif | 35.903908 |
| 8.tif | 32.490726 | 8t.tif | 31.891182 |
| 9.tif | 31.168495 | 9t.tif | 31.137133 |
| 10.tif | 31.956505 | 10t.tif | 31.914854 |

4网络：inception\_v3

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Euclidean\_Distance\_with1 | filename |  |
| 1.tif | 36.935966 | 1t.tif | 37.02857 |
| 2.tif | 32.762104 | 2t.tif | 33.112774 |
| 3.tif | 34.517838 | 3t.tif | 33.232773 |
| 4.tif | 32.547764 | 4t.tif | 32.55572 |
| 5.tif | 30.646057 | 5t.tif | 30.78767 |
| 6.tif | 32.436646 | 6t.tif | 32.712963 |
| 7.tif | 40.485203 | 7t.tif | 40.944496 |
| 8.tif | 31.039402 | 8t.tif | 31.880316 |
| 9.tif | 36.11471 | 9t.tif | 36.865906 |
| 10.tif | 32.20263 | 10t.tif | 32.534973 |

5网络：alexnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Euclidean\_Distance\_with1 | filename |  |
| 1.tif | 195.58339 | 1t.tif | 193.10799 |
| 2.tif | 186.60225 | 2t.tif | 190.12042 |
| 3.tif | 198.85074 | 3t.tif | 187.20059 |
| 4.tif | 220.55243 | 4t.tif | 223.59947 |
| 5.tif | 146.45169 | 5t.tif | 137.72032 |
| 6.tif | 222.90929 | 6t.tif | 186.7913 |
| 7.tif | 204.86865 | 7t.tif | 189.78304 |
| 8.tif | 170.32188 | 8t.tif | 169.82527 |
| 9.tif | 167.35167 | 9t.tif | 167.42696 |
| 10.tif | 168.24579 | 10t.tif | 167.38562 |

6网络：densenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Euclidean\_Distance\_with1 | filename |  |
| 1.tif | 348.55222 | 1t.tif | 350.39038 |
| 2.tif | 339.32806 | 2t.tif | 343.78574 |
| 3.tif | 355.83673 | 3t.tif | 353.9575 |
| 4.tif | 369.38495 | 4t.tif | 358.86926 |
| 5.tif | 330.65637 | 5t.tif | 327.47437 |
| 6.tif | 364.84277 | 6t.tif | 363.55234 |
| 7.tif | 321.12805 | 7t.tif | 319.66565 |
| 8.tif | 312.7871 | 8t.tif | 313.3227 |
| 9.tif | 338.77252 | 9t.tif | 342.70963 |
| 10.tif | 328.8531 | 10t.tif | 329.92432 |

7网络：googlenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Euclidean\_Distance\_with1 | filename |  |
| 1.tif | 26.518059 | 1t.tif | 26.675165 |
| 2.tif | 23.351099 | 2t.tif | 23.804749 |
| 3.tif | 24.192373 | 3t.tif | 24.429586 |
| 4.tif | 22.355417 | 4t.tif | 22.045082 |
| 5.tif | 23.561031 | 5t.tif | 23.40632 |
| 6.tif | 23.960005 | 6t.tif | 24.135841 |
| 7.tif | 26.789202 | 7t.tif | 26.93089 |
| 8.tif | 22.906338 | 8t.tif | 23.187162 |
| 9.tif | 26.329144 | 9t.tif | 25.57178 |
| 10.tif | 22.899054 | 10t.tif | 22.67261 |

8网络：mobilenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Euclidean\_Distance\_with1 | filename |  |
| 1.tif | 26.86246 | 1t.tif | 26.727358 |
| 2.tif | 25.32274 | 2t.tif | 25.198792 |
| 3.tif | 26.473848 | 3t.tif | 26.739733 |
| 4.tif | 25.67015 | 4t.tif | 25.751467 |
| 5.tif | 25.99026 | 5t.tif | 25.887138 |
| 6.tif | 26.13858 | 6t.tif | 25.468649 |
| 7.tif | 25.437098 | 7t.tif | 25.818657 |
| 8.tif | 25.465136 | 8t.tif | 25.578821 |
| 9.tif | 27.338377 | 9t.tif | 27.5207 |
| 10.tif | 25.531021 | 10t.tif | 25.463717 |

9网络：vggnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Euclidean\_Distance\_with1 | filename |  |
| 1.tif | 269.23096 | 1t.tif | 264.62885 |
| 2.tif | 201.88239 | 2t.tif | 199.76463 |
| 3.tif | 222.8679 | 3t.tif | 215.68488 |
| 4.tif | 209.08012 | 4t.tif | 208.32013 |
| 5.tif | 183.7007 | 5t.tif | 181.08777 |
| 6.tif | 204.01268 | 6t.tif | 197.2709 |
| 7.tif | 278.77777 | 7t.tif | 281.2738 |
| 8.tif | 194.11156 | 8t.tif | 196.10962 |
| 9.tif | 232.36943 | 9t.tif | 232.89545 |
| 10.tif | 193.08813 | 10t.tif | 191.49 |

2曼哈顿距离：

1网络：resnet18

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 388.70822 | 1t.tif | 408.58035 |
| 2.tif | 338.2602 | 2t.tif | 350.24103 |
| 3.tif | 368.90265 | 3t.tif | 367.50598 |
| 4.tif | 350.65982 | 4t.tif | 345.39954 |
| 5.tif | 328.00513 | 5t.tif | 338.74597 |
| 6.tif | 357.12158 | 6t.tif | 340.4992 |
| 7.tif | 393.372 | 7t.tif | 401.6151 |
| 8.tif | 332.61606 | 8t.tif | 320.44785 |
| 9.tif | 353.93945 | 9t.tif | 351.99902 |
| 10.tif | 292.30606 | 10t.tif | 288.53918 |

2网络：resnet50

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 1387.2173 | 1t.tif | 1376.7642 |
| 2.tif | 1278.9424 | 2t.tif | 1270.6831 |
| 3.tif | 1219.884 | 3t.tif | 1208.5691 |
| 4.tif | 1155.8508 | 4t.tif | 1158.9824 |
| 5.tif | 1299.8336 | 5t.tif | 1280.9976 |
| 6.tif | 1272.4221 | 6t.tif | 1263.9559 |
| 7.tif | 1450.5164 | 7t.tif | 1486.1023 |
| 8.tif | 1312.3047 | 8t.tif | 1316.5125 |
| 9.tif | 1276.414 | 9t.tif | 1264.7646 |
| 10.tif | 1393.5396 | 10t.tif | 1389.4766 |

3网络：resnet152

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 1364.7537 | 1t.tif | 1348.0382 |
| 2.tif | 1278.3044 | 2t.tif | 1274.2537 |
| 3.tif | 1299.0684 | 3t.tif | 1264.8469 |
| 4.tif | 1188.777 | 4t.tif | 1192.3667 |
| 5.tif | 1310.9302 | 5t.tif | 1308.3207 |
| 6.tif | 1314.9729 | 6t.tif | 1274.5017 |
| 7.tif | 1494.6256 | 7t.tif | 1498.7249 |
| 8.tif | 1337.3086 | 8t.tif | 1316.2427 |
| 9.tif | 1262.9006 | 9t.tif | 1266.4623 |
| 10.tif | 1324.3394 | 10t.tif | 1323.8314 |

4网络：inception\_v3

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 1597.5702 | 1t.tif | 1602.0659 |
| 2.tif | 1386.3081 | 2t.tif | 1400.777 |
| 3.tif | 1476.3093 | 3t.tif | 1410.9443 |
| 4.tif | 1348.2998 | 4t.tif | 1346.6614 |
| 5.tif | 1265.3204 | 5t.tif | 1276.196 |
| 6.tif | 1366.4998 | 6t.tif | 1381.1069 |
| 7.tif | 1780.8457 | 7t.tif | 1797.9902 |
| 8.tif | 1290.5972 | 8t.tif | 1335.0413 |
| 9.tif | 1567.4794 | 9t.tif | 1602.0466 |
| 10.tif | 1356.2583 | 10t.tif | 1371.5834 |

5网络：alexnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 12779.246 | 1t.tif | 12640.854 |
| 2.tif | 12180.791 | 2t.tif | 12306.509 |
| 3.tif | 12862.985 | 3t.tif | 12379.492 |
| 4.tif | 13641.816 | 4t.tif | 13683.308 |
| 5.tif | 10632.827 | 5t.tif | 10332.939 |
| 6.tif | 13332.106 | 6t.tif | 11953.641 |
| 7.tif | 13115.002 | 7t.tif | 12458.728 |
| 8.tif | 11728.176 | 8t.tif | 11721.735 |
| 9.tif | 11795.543 | 9t.tif | 11769.855 |
| 10.tif | 11499.414 | 10t.tif | 11462.869 |

6网络：densenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 62379.13 | 1t.tif | 62708.844 |
| 2.tif | 60619.418 | 2t.tif | 60622.703 |
| 3.tif | 61585.473 | 3t.tif | 61317.625 |
| 4.tif | 63147.98 | 4t.tif | 62141.965 |
| 5.tif | 59817.58 | 5t.tif | 59739.574 |
| 6.tif | 63604.113 | 6t.tif | 63590.008 |
| 7.tif | 58066.773 | 7t.tif | 58022.566 |
| 8.tif | 58403.195 | 8t.tif | 58445.074 |
| 9.tif | 61174.71 | 9t.tif | 61424.02 |
| 10.tif | 60131.984 | 10t.tif | 60271.04 |

7网络：googlenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 798.2614 | 1t.tif | 806.4115 |
| 2.tif | 697.5475 | 2t.tif | 709.172 |
| 3.tif | 718.41473 | 3t.tif | 726.66736 |
| 4.tif | 652.34204 | 4t.tif | 645.0672 |
| 5.tif | 695.337 | 5t.tif | 694.161 |
| 6.tif | 719.54895 | 6t.tif | 724.8144 |
| 7.tif | 790.1348 | 7t.tif | 807.193 |
| 8.tif | 674.60144 | 8t.tif | 687.408 |
| 9.tif | 769.3578 | 9t.tif | 754.8566 |
| 10.tif | 680.00323 | 10t.tif | 673.1444 |

8网络：mobilenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 868.0205 | 1t.tif | 862.63513 |
| 2.tif | 809.0322 | 2t.tif | 797.93054 |
| 3.tif | 840.93164 | 3t.tif | 852.35266 |
| 4.tif | 794.8366 | 4t.tif | 799.69275 |
| 5.tif | 844.4149 | 5t.tif | 840.69086 |
| 6.tif | 836.7815 | 6t.tif | 810.896 |
| 7.tif | 808.26794 | 7t.tif | 826.4015 |
| 8.tif | 810.82776 | 8t.tif | 820.257 |
| 9.tif | 862.3624 | 9t.tif | 871.61487 |
| 10.tif | 827.13074 | 10t.tif | 824.15356 |

9网络：vggnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 29282.254 | 1t.tif | 29088.773 |
| 2.tif | 26743.31 | 2t.tif | 26601.398 |
| 3.tif | 27693.305 | 3t.tif | 27302.201 |
| 4.tif | 27084.322 | 4t.tif | 27037.998 |
| 5.tif | 25605.023 | 5t.tif | 25441.658 |
| 6.tif | 26668.475 | 6t.tif | 26360.568 |
| 7.tif | 30025.701 | 7t.tif | 30122.031 |
| 8.tif | 26353.684 | 8t.tif | 26517.336 |
| 9.tif | 28176.932 | 9t.tif | 28293.36 |
| 10.tif | 26396.11 | 10t.tif | 26311.748 |

3切比雪夫距离：

1网络：resnet18

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 4.7452025 | 1t.tif | 4.636011 |
| 2.tif | 4.0247617 | 2t.tif | 3.9156137 |
| 3.tif | 5.0014443 | 3t.tif | 4.310819 |
| 4.tif | 5.6988306 | 4t.tif | 5.1989255 |
| 5.tif | 4.122681 | 5t.tif | 4.9482317 |
| 6.tif | 3.8020163 | 6t.tif | 4.0493402 |
| 7.tif | 7.1023026 | 7t.tif | 7.1044893 |
| 8.tif | 3.5774603 | 8t.tif | 3.6536922 |
| 9.tif | 5.0819116 | 9t.tif | 4.3688354 |
| 10.tif | 3.991724 | 10t.tif | 4.093561 |

2网络：resnet50

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 4.9907 | 1t.tif | 4.811231 |
| 2.tif | 1.9294271 | 2t.tif | 1.9409738 |
| 3.tif | 2.4127097 | 3t.tif | 2.554913 |
| 4.tif | 2.6081166 | 4t.tif | 2.6383832 |
| 5.tif | 2.802292 | 5t.tif | 2.8236663 |
| 6.tif | 4.4274 | 6t.tif | 3.3748822 |
| 7.tif | 3.5798888 | 7t.tif | 3.5960836 |
| 8.tif | 2.81251 | 8t.tif | 2.7223728 |
| 9.tif | 3.1024694 | 9t.tif | 2.9549763 |
| 10.tif | 2.4687269 | 10t.tif | 2.3927 |

3网络：resnet152

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 3.6329942 | 1t.tif | 3.0469074 |
| 2.tif | 3.4901323 | 2t.tif | 3.0533485 |
| 3.tif | 4.981445 | 3t.tif | 3.936582 |
| 4.tif | 3.4460201 | 4t.tif | 3.9512434 |
| 5.tif | 3.4379835 | 5t.tif | 3.6395683 |
| 6.tif | 4.7682004 | 6t.tif | 3.4148192 |
| 7.tif | 5.762897 | 7t.tif | 5.301191 |
| 8.tif | 3.0295172 | 8t.tif | 2.4431446 |
| 9.tif | 3.5982018 | 9t.tif | 3.9888525 |
| 10.tif | 4.381856 | 10t.tif | 4.272159 |

4网络：inception\_v3

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 1.9914384 | 1t.tif | 1.8186374 |
| 2.tif | 1.6417603 | 2t.tif | 2.191958 |
| 3.tif | 1.4722996 | 3t.tif | 1.1992581 |
| 4.tif | 2.5420856 | 4t.tif | 2.7599413 |
| 5.tif | 1.3970706 | 5t.tif | 1.2316353 |
| 6.tif | 1.6909242 | 6t.tif | 1.9522641 |
| 7.tif | 3.8900647 | 7t.tif | 4.3011303 |
| 8.tif | 1.3235402 | 8t.tif | 1.177119 |
| 9.tif | 1.0386901 | 9t.tif | 1.0 |
| 10.tif | 3.8512535 | 10t.tif | 4.0454483 |

5网络：alexnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 17.161434 | 1t.tif | 17.16123 |
| 2.tif | 19.291473 | 2t.tif | 19.375942 |
| 3.tif | 21.09739 | 3t.tif | 21.001852 |
| 4.tif | 19.618835 | 4t.tif | 21.265903 |
| 5.tif | 15.815697 | 5t.tif | 12.030552 |
| 6.tif | 19.980343 | 6t.tif | 19.202623 |
| 7.tif | 14.601411 | 7t.tif | 13.780062 |
| 8.tif | 14.592642 | 8t.tif | 14.887363 |
| 9.tif | 12.885336 | 9t.tif | 12.74027 |
| 10.tif | 15.051628 | 10t.tif | 15.544302 |

6网络：densenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 20.154558 | 1t.tif | 20.345991 |
| 2.tif | 19.375147 | 2t.tif | 20.436226 |
| 3.tif | 23.859503 | 3t.tif | 23.921532 |
| 4.tif | 23.573032 | 4t.tif | 24.14993 |
| 5.tif | 20.042294 | 5t.tif | 20.836206 |
| 6.tif | 18.672213 | 6t.tif | 18.87062 |
| 7.tif | 24.273691 | 7t.tif | 24.043215 |
| 8.tif | 15.221415 | 8t.tif | 15.972649 |
| 9.tif | 23.800102 | 9t.tif | 19.673994 |
| 10.tif | 22.75195 | 10t.tif | 24.471653 |

7网络：googlenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 2.1918988 | 1t.tif | 2.2813365 |
| 2.tif | 1.3536847 | 2t.tif | 1.5667098 |
| 3.tif | 2.1652663 | 3t.tif | 2.6771178 |
| 4.tif | 2.2972069 | 4t.tif | 2.0289054 |
| 5.tif | 1.1693039 | 5t.tif | 1.0684087 |
| 6.tif | 1.2596242 | 6t.tif | 1.1997659 |
| 7.tif | 3.4796686 | 7t.tif | 2.8298645 |
| 8.tif | 1.5106487 | 8t.tif | 1.7727654 |
| 9.tif | 4.890291 | 9t.tif | 4.0860868 |
| 10.tif | 1.216778 | 10t.tif | 1.1103404 |

8网络：mobilenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 1.9307108 | 1t.tif | 2.0440764 |
| 2.tif | 2.3081696 | 2t.tif | 2.3870342 |
| 3.tif | 2.917804 | 3t.tif | 2.5497506 |
| 4.tif | 2.6673727 | 4t.tif | 2.6520557 |
| 5.tif | 2.3692324 | 5t.tif | 2.2329028 |
| 6.tif | 2.7290986 | 6t.tif | 2.7107978 |
| 7.tif | 1.9546721 | 7t.tif | 2.0452645 |
| 8.tif | 2.1452308 | 8t.tif | 2.313132 |
| 9.tif | 2.534192 | 9t.tif | 2.523409 |
| 10.tif | 2.0739353 | 10t.tif | 2.067806 |

9网络：vggnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 28.903484 | 1t.tif | 29.336649 |
| 2.tif | 15.506859 | 2t.tif | 13.342934 |
| 3.tif | 19.906445 | 3t.tif | 19.509058 |
| 4.tif | 16.90067 | 4t.tif | 16.900679 |
| 5.tif | 11.648238 | 5t.tif | 11.608215 |
| 6.tif | 23.777096 | 6t.tif | 21.222338 |
| 7.tif | 26.883999 | 7t.tif | 25.36821 |
| 8.tif | 15.863976 | 8t.tif | 14.218176 |
| 9.tif | 19.301247 | 9t.tif | 19.30533 |
| 10.tif | 18.891495 | 10t.tif | 18.881138 |

4余弦相似度

1网络：resnet18

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.6686257 | 1t.tif | 0.6584656 |
| 2.tif | 0.7760275 | 2t.tif | 0.75926423 |
| 3.tif | 0.7258943 | 3t.tif | 0.73519254 |
| 4.tif | 0.71870875 | 4t.tif | 0.7202917 |
| 5.tif | 0.74334764 | 5t.tif | 0.73570603 |
| 6.tif | 0.7594504 | 6t.tif | 0.77256745 |
| 7.tif | 0.69236577 | 7t.tif | 0.6845843 |
| 8.tif | 0.7369469 | 8t.tif | 0.74962306 |
| 9.tif | 0.73683167 | 9t.tif | 0.73812777 |
| 10.tif | 0.78777325 | 10t.tif | 0.78496057 |

2网络：resnet50

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.6539249 | 1t.tif | 0.6615156 |
| 2.tif | 0.7404606 | 2t.tif | 0.7418551 |
| 3.tif | 0.7592724 | 3t.tif | 0.757579 |
| 4.tif | 0.76759064 | 4t.tif | 0.7641288 |
| 5.tif | 0.72449994 | 5t.tif | 0.729735 |
| 6.tif | 0.7095816 | 6t.tif | 0.7225816 |
| 7.tif | 0.6903774 | 7t.tif | 0.67084515 |
| 8.tif | 0.7096481 | 8t.tif | 0.71463656 |
| 9.tif | 0.71430224 | 9t.tif | 0.71896636 |
| 10.tif | 0.7179544 | 10t.tif | 0.72144735 |

3网络：resnet152

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.6661646 | 1t.tif | 0.6786397 |
| 2.tif | 0.707232 | 2t.tif | 0.7115776 |
| 3.tif | 0.69298196 | 3t.tif | 0.7157555 |
| 4.tif | 0.74635506 | 4t.tif | 0.7433393 |
| 5.tif | 0.6955944 | 5t.tif | 0.6944856 |
| 6.tif | 0.68568736 | 6t.tif | 0.7051512 |
| 7.tif | 0.6039268 | 7t.tif | 0.60914797 |
| 8.tif | 0.69657433 | 8t.tif | 0.7108969 |
| 9.tif | 0.72558045 | 9t.tif | 0.72761875 |
| 10.tif | 0.71516186 | 10t.tif | 0.71674573 |

4网络：inception\_v3

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.6190276 | 1t.tif | 0.61886805 |
| 2.tif | 0.7335917 | 2t.tif | 0.72415733 |
| 3.tif | 0.707495 | 3t.tif | 0.7286926 |
| 4.tif | 0.7034301 | 4t.tif | 0.7037613 |
| 5.tif | 0.74386585 | 5t.tif | 0.75506085 |
| 6.tif | 0.7310053 | 6t.tif | 0.7282399 |
| 7.tif | 0.46766356 | 7t.tif | 0.43518534 |
| 8.tif | 0.76104045 | 8t.tif | 0.75250554 |
| 9.tif | 0.68313855 | 9t.tif | 0.6534788 |
| 10.tif | 0.72709066 | 10t.tif | 0.7196131 |

5网络：alexnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.4307413631015354 | 1t.tif | 0.42505693435668945 |
| 2.tif | 0.409692472881741 | 2t.tif | 0.4218202961815728 |
| 3.tif | 0.4421784083048503 | 3t.tif | 0.44393568568759495 |
| 4.tif | 0.43333930439419216 | 4t.tif | 0.4265703095330132 |
| 5.tif | 0.3613053427802192 | 5t.tif | 0.3599160512288411 |
| 6.tif | 0.3835399415757921 | 6t.tif | 0.40179289711846244 |
| 7.tif | 0.4256763723161485 | 7t.tif | 0.4213266637590196 |
| 8.tif | 0.46619012620713973 | 8t.tif | 0.46712509791056317 |
| 9.tif | 0.48514138327704537 | 9t.tif | 0.4778087404039171 |
| 10.tif | 0.42385225825839573 | 10t.tif | 0.4267373349931505 |

6网络：densenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.1289230268828723 | 1t.tif | 0.12572888938748106 |
| 2.tif | 0.1923457943663305 | 2t.tif | 0.2005879733027244 |
| 3.tif | 0.1701082112837811 | 3t.tif | 0.17060244813257333 |
| 4.tif | 0.23398837264703246 | 4t.tif | 0.2343473045193419 |
| 5.tif | 0.20429687110745176 | 5t.tif | 0.20139822667958784 |
| 6.tif | 0.16820160223513234 | 6t.tif | 0.16198123231226083 |
| 7.tif | 0.1561874467499402 | 7t.tif | 0.15934985997725507 |
| 8.tif | 0.19396408236756615 | 8t.tif | 0.1988933329679528 |
| 9.tif | 0.13673849495089785 | 9t.tif | 0.14093171333780094 |
| 10.tif | 0.11169196148307955 | 10t.tif | 0.11161497661045619 |

7网络：googlenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.5627375 | 1t.tif | 0.5570299 |
| 2.tif | 0.7273577 | 2t.tif | 0.70701814 |
| 3.tif | 0.67865723 | 3t.tif | 0.6650976 |
| 4.tif | 0.72627807 | 4t.tif | 0.743575 |
| 5.tif | 0.70675194 | 5t.tif | 0.7157 |
| 6.tif | 0.71220595 | 6t.tif | 0.7095974 |
| 7.tif | 0.55254734 | 7t.tif | 0.5407023 |
| 8.tif | 0.71350527 | 8t.tif | 0.711396 |
| 9.tif | 0.56863433 | 9t.tif | 0.60383534 |
| 10.tif | 0.72393274 | 10t.tif | 0.72940314 |

8网络：mobilenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.6656813 | 1t.tif | 0.66984445 |
| 2.tif | 0.7085325 | 2t.tif | 0.71329546 |
| 3.tif | 0.6914469 | 3t.tif | 0.6814562 |
| 4.tif | 0.71977764 | 4t.tif | 0.7182216 |
| 5.tif | 0.6894978 | 5t.tif | 0.6926993 |
| 6.tif | 0.69221514 | 6t.tif | 0.7081256 |
| 7.tif | 0.7061926 | 7t.tif | 0.698196 |
| 8.tif | 0.703846 | 8t.tif | 0.70104843 |
| 9.tif | 0.6794963 | 9t.tif | 0.6715832 |
| 10.tif | 0.7030884 | 10t.tif | 0.7045404 |

9网络：vggnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.2729805732259945 | 1t.tif | 0.2777431449111627 |
| 2.tif | 0.29548327776850486 | 2t.tif | 0.29358571889449137 |
| 3.tif | 0.29444692572768855 | 3t.tif | 0.2967929645460479 |
| 4.tif | 0.3152011170679209 | 4t.tif | 0.3139348127404038 |
| 5.tif | 0.2949857711791992 | 5t.tif | 0.294235287880411 |
| 6.tif | 0.2868703336131816 | 6t.tif | 0.29114688172632336 |
| 7.tif | 0.30052369954634683 | 7t.tif | 0.29736094572106186 |
| 8.tif | 0.29079384706458267 | 8t.tif | 0.2958605435429787 |
| 9.tif | 0.2945423126220703 | 9t.tif | 0.2893938920935806 |
| 10.tif | 0.2679986369853117 | 10t.tif | 0.2673839063060527 |

5闵可夫斯基距离

1网络：resnet18

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 21.622484358509418 | 1t.tif | 22.788613886139775 |
| 2.tif | 19.32948598179249 | 2t.tif | 19.732680053894732 |
| 3.tif | 20.95336313133698 | 3t.tif | 20.52499652077277 |
| 4.tif | 20.726375505658545 | 4t.tif | 20.34153423753279 |
| 5.tif | 17.73076005970759 | 5t.tif | 18.596629405463254 |
| 6.tif | 20.526707813056095 | 6t.tif | 19.37909955368718 |
| 7.tif | 24.37857545891987 | 7t.tif | 25.123148835722702 |
| 8.tif | 18.96599708452356 | 8t.tif | 18.131176547270208 |
| 9.tif | 21.045728033428333 | 9t.tif | 20.272532795324317 |
| 10.tif | 16.627457745374628 | 10t.tif | 16.23372739173899 |

2网络：resnet50

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 34.423020436003284 | 1t.tif | 34.06486158671241 |
| 2.tif | 30.83442226927055 | 2t.tif | 30.700761279878105 |
| 3.tif | 29.800622265354523 | 3t.tif | 29.69084171159465 |
| 4.tif | 29.011939386278968 | 4t.tif | 29.192267410437648 |
| 5.tif | 31.495766006991918 | 5t.tif | 31.191073348646164 |
| 6.tif | 31.951633140601164 | 6t.tif | 31.295921337816733 |
| 7.tif | 33.99853153423504 | 7t.tif | 34.70416266458535 |
| 8.tif | 32.01398925177086 | 8t.tif | 31.882259245383533 |
| 9.tif | 31.68144935760417 | 9t.tif | 31.463683492341612 |
| 10.tif | 32.83718193722057 | 10t.tif | 32.71492933757461 |

3网络：resnet152

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 34.06498163265044 | 1t.tif | 33.305115416263384 |
| 2.tif | 32.07180359657841 | 2t.tif | 31.82620249931405 |
| 3.tif | 33.07542354344272 | 3t.tif | 31.67366137969074 |
| 4.tif | 30.172160229749668 | 4t.tif | 30.3889981891062 |
| 5.tif | 32.55242353988889 | 5t.tif | 32.70410481391728 |
| 6.tif | 34.00654090346076 | 6t.tif | 32.40149585426188 |
| 7.tif | 36.07584783307247 | 7t.tif | 35.90390923342732 |
| 8.tif | 32.490725088813804 | 8t.tif | 31.891181937199548 |
| 9.tif | 31.168495274174692 | 9t.tif | 31.137132110933887 |
| 10.tif | 31.956503870862306 | 10t.tif | 31.914853302625804 |

4网络：inception\_v3

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 36.93596489777527 | 1t.tif | 37.02856827051327 |
| 2.tif | 32.762104156326714 | 2t.tif | 33.11277412943342 |
| 3.tif | 34.51783711505636 | 3t.tif | 33.232773527470215 |
| 4.tif | 32.54776388008476 | 4t.tif | 32.555721463361856 |
| 5.tif | 30.646056616354617 | 5t.tif | 30.78767084840182 |
| 6.tif | 32.43664573176648 | 6t.tif | 32.712962865707 |
| 7.tif | 40.48520418390526 | 7t.tif | 40.944496360641224 |
| 8.tif | 31.039401701833956 | 8t.tif | 31.880316077834866 |
| 9.tif | 36.11471252741049 | 9t.tif | 36.86590691646467 |
| 10.tif | 32.202628422905946 | 10t.tif | 32.53497216938259 |

5网络：alexnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 195.5833721683671 | 1t.tif | 193.10798873298847 |
| 2.tif | 186.60224660357122 | 2t.tif | 190.12041825511537 |
| 3.tif | 198.85073115593514 | 3t.tif | 187.20059428324475 |
| 4.tif | 220.5524314080441 | 4t.tif | 223.59946053154957 |
| 5.tif | 146.45169052028726 | 5t.tif | 137.72032064568393 |
| 6.tif | 222.90927947261414 | 6t.tif | 186.79130650943048 |
| 7.tif | 204.86865075579522 | 7t.tif | 189.7830381317045 |
| 8.tif | 170.32188620924498 | 8t.tif | 169.82526635854276 |
| 9.tif | 167.35167173126774 | 9t.tif | 167.4269546884551 |
| 10.tif | 168.24578607278698 | 10t.tif | 167.3856244294145 |

6网络：densenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 348.55219524843045 | 1t.tif | 350.39037381540606 |
| 2.tif | 339.3280584478684 | 2t.tif | 343.78572541628307 |
| 3.tif | 355.83672300298065 | 3t.tif | 353.95750318717637 |
| 4.tif | 369.3849617946026 | 4t.tif | 358.8692637124277 |
| 5.tif | 330.6563666595579 | 5t.tif | 327.47436684036813 |
| 6.tif | 364.84277435629724 | 6t.tif | 363.5523303116073 |
| 7.tif | 321.12806538046465 | 7t.tif | 319.6656456361865 |
| 8.tif | 312.78710561258754 | 8t.tif | 313.32270455155333 |
| 9.tif | 338.7725084772966 | 9t.tif | 342.70961879191543 |
| 10.tif | 328.8530850737149 | 10t.tif | 329.92432844517543 |

7网络：googlenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 26.518057950403108 | 1t.tif | 26.67516547511936 |
| 2.tif | 23.351098554691973 | 2t.tif | 23.804747753862046 |
| 3.tif | 24.19237348956472 | 3t.tif | 24.429586314549006 |
| 4.tif | 22.355417217199907 | 4t.tif | 22.045082370866325 |
| 5.tif | 23.56103122494456 | 5t.tif | 23.406320406269277 |
| 6.tif | 23.96000390461936 | 6t.tif | 24.135840949910467 |
| 7.tif | 26.78920147966282 | 7t.tif | 26.93088983209499 |
| 8.tif | 22.906337930424684 | 8t.tif | 23.187163070328378 |
| 9.tif | 26.32914269175532 | 9t.tif | 25.571779241083078 |
| 10.tif | 22.89905321587759 | 10t.tif | 22.672608587804387 |

8网络：mobilenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 26.86245960145578 | 1t.tif | 26.727357211949634 |
| 2.tif | 25.32274098389627 | 2t.tif | 25.19879215312834 |
| 3.tif | 26.473847926273155 | 3t.tif | 26.739732714895684 |
| 4.tif | 25.67015005807146 | 4t.tif | 25.751467172249377 |
| 5.tif | 25.990259546772396 | 5t.tif | 25.887138136503957 |
| 6.tif | 26.13857956731534 | 6t.tif | 25.46864934796062 |
| 7.tif | 25.43709809456763 | 7t.tif | 25.818656575115405 |
| 8.tif | 25.465135863200295 | 8t.tif | 25.578821768151773 |
| 9.tif | 27.338376704192083 | 9t.tif | 27.520699773363773 |
| 10.tif | 25.531020500804505 | 10t.tif | 25.463716910660352 |

9网络：vggnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 269.2309504635379 | 1t.tif | 264.62885271167994 |
| 2.tif | 201.88238183098096 | 2t.tif | 199.76462712402312 |
| 3.tif | 222.8679103611599 | 3t.tif | 215.68488298904956 |
| 4.tif | 209.08012818056142 | 4t.tif | 208.32013187339817 |
| 5.tif | 183.7007055477741 | 5t.tif | 181.08776144110348 |
| 6.tif | 204.01267577040403 | 6t.tif | 197.27091143906645 |
| 7.tif | 278.7777732800805 | 7t.tif | 281.2738045481662 |
| 8.tif | 194.11155780890533 | 8t.tif | 196.10961340217364 |
| 9.tif | 232.36944419124902 | 9t.tif | 232.89544663324784 |
| 10.tif | 193.08813361713868 | 10t.tif | 191.4900046347067 |

6杰卡德距离

1网络：resnet18

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.01171875 | 1t.tif | 0.021484375 |
| 2.tif | 0.005859375 | 2t.tif | 0.005859375 |
| 3.tif | 0.009765625 | 3t.tif | 0.0078125 |
| 4.tif | 0.015625 | 4t.tif | 0.01171875 |
| 5.tif | 0.009765625 | 5t.tif | 0.01171875 |
| 6.tif | 0.015625 | 6t.tif | 0.01171875 |
| 7.tif | 0.001953125 | 7t.tif | 0.015625 |
| 8.tif | 0.005859375 | 8t.tif | 0.005859375 |
| 9.tif | 0.0078125 | 9t.tif | 0.001953125 |
| 10.tif | 0.001953125 | 10t.tif | 0.0 |

2网络：resnet50

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.0068359375 | 1t.tif | 0.0053710938 |
| 2.tif | 0.0024414062 | 2t.tif | 0.0009765625 |
| 3.tif | 0.0009765625 | 3t.tif | 0.0009765625 |
| 4.tif | 0.0014648438 | 4t.tif | 0.0024414062 |
| 5.tif | 0.0053710938 | 5t.tif | 0.00390625 |
| 6.tif | 0.00390625 | 6t.tif | 0.0024414062 |
| 7.tif | 0.001953125 | 7t.tif | 0.0009765625 |
| 8.tif | 0.0053710938 | 8t.tif | 0.0029296875 |
| 9.tif | 0.0029296875 | 9t.tif | 0.001953125 |
| 10.tif | 0.0009765625 | 10t.tif | 0.00048828125 |

3网络：resnet152

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.0087890625 | 1t.tif | 0.0053710938 |
| 2.tif | 0.005859375 | 2t.tif | 0.00390625 |
| 3.tif | 0.0053710938 | 3t.tif | 0.0024414062 |
| 4.tif | 0.0048828125 | 4t.tif | 0.0043945312 |
| 5.tif | 0.0078125 | 5t.tif | 0.0053710938 |
| 6.tif | 0.0068359375 | 6t.tif | 0.00390625 |
| 7.tif | 0.0087890625 | 7t.tif | 0.009765625 |
| 8.tif | 0.0068359375 | 8t.tif | 0.0063476562 |
| 9.tif | 0.001953125 | 9t.tif | 0.0014648438 |
| 10.tif | 0.0009765625 | 10t.tif | 0.0009765625 |

4网络：inception\_v3

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.0546875 | 1t.tif | 0.0546875 |
| 2.tif | 0.0068359375 | 2t.tif | 0.0078125 |
| 3.tif | 0.011230469 | 3t.tif | 0.009765625 |
| 4.tif | 0.020996094 | 4t.tif | 0.016601562 |
| 5.tif | 0.0024414062 | 5t.tif | 0.0014648438 |
| 6.tif | 0.0063476562 | 6t.tif | 0.0087890625 |
| 7.tif | 0.111816406 | 7t.tif | 0.12597656 |
| 8.tif | 0.0053710938 | 8t.tif | 0.005859375 |
| 9.tif | 0.009277344 | 9t.tif | 0.0146484375 |
| 10.tif | 0.0043945312 | 10t.tif | 0.005859375 |

5网络：alexnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.6703559 | 1t.tif | 0.6788194 |
| 2.tif | 0.6854384 | 2t.tif | 0.66569006 |
| 3.tif | 0.6490885 | 3t.tif | 0.65462244 |
| 4.tif | 0.64659286 | 4t.tif | 0.6547309 |
| 5.tif | 0.75097656 | 5t.tif | 0.7519531 |
| 6.tif | 0.7166884 | 6t.tif | 0.69433594 |
| 7.tif | 0.66948783 | 7t.tif | 0.6741537 |
| 8.tif | 0.6218533 | 8t.tif | 0.62597656 |
| 9.tif | 0.60264754 | 9t.tif | 0.6128472 |
| 10.tif | 0.6663412 | 10t.tif | 0.6626519 |

6网络：densenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.48622847 | 1t.tif | 0.48590958 |
| 2.tif | 0.4443758 | 2t.tif | 0.43935347 |
| 3.tif | 0.46289062 | 3t.tif | 0.45906407 |
| 4.tif | 0.43421155 | 4t.tif | 0.42958784 |
| 5.tif | 0.44164538 | 5t.tif | 0.44284117 |
| 6.tif | 0.46603954 | 6t.tif | 0.46599966 |
| 7.tif | 0.46880978 | 7t.tif | 0.46721542 |
| 8.tif | 0.436085 | 8t.tif | 0.43654335 |
| 9.tif | 0.47506773 | 9t.tif | 0.4713608 |
| 10.tif | 0.48624843 | 10t.tif | 0.48565054 |

7网络：googlenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.087890625 | 1t.tif | 0.08203125 |
| 2.tif | 0.020507812 | 2t.tif | 0.0234375 |
| 3.tif | 0.024414062 | 3t.tif | 0.0234375 |
| 4.tif | 0.01953125 | 4t.tif | 0.015625 |
| 5.tif | 0.037109375 | 5t.tif | 0.016601562 |
| 6.tif | 0.0234375 | 6t.tif | 0.024414062 |
| 7.tif | 0.041015625 | 7t.tif | 0.08886719 |
| 8.tif | 0.01953125 | 8t.tif | 0.025390625 |
| 9.tif | 0.06640625 | 9t.tif | 0.051757812 |
| 10.tif | 0.0126953125 | 10t.tif | 0.01171875 |

8网络：mobilenet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.046875 | 1t.tif | 0.048437476 |
| 2.tif | 0.0234375 | 2t.tif | 0.028124988 |
| 3.tif | 0.032031238 | 3t.tif | 0.0390625 |
| 4.tif | 0.02734375 | 4t.tif | 0.033593774 |
| 5.tif | 0.048437476 | 5t.tif | 0.049218774 |
| 6.tif | 0.033593774 | 6t.tif | 0.029687524 |
| 7.tif | 0.035937488 | 7t.tif | 0.034375012 |
| 8.tif | 0.040624976 | 8t.tif | 0.036718726 |
| 9.tif | 0.036718726 | 9t.tif | 0.0390625 |
| 10.tif | 0.032031238 | 10t.tif | 0.029687524 |

9网络：vggnet

|  |  |  |  |
| --- | --- | --- | --- |
| filename | Distance | filename | Distance |
| 1.tif | 0.85251915 | 1t.tif | 0.8478954 |
| 2.tif | 0.83868784 | 2t.tif | 0.84004307 |
| 3.tif | 0.83490115 | 3t.tif | 0.8334662 |
| 4.tif | 0.81094545 | 4t.tif | 0.8116231 |
| 5.tif | 0.8359375 | 5t.tif | 0.8364557 |
| 6.tif | 0.8406011 | 6t.tif | 0.8354193 |
| 7.tif | 0.8154098 | 7t.tif | 0.8199538 |
| 8.tif | 0.84151787 | 8t.tif | 0.836934 |
| 9.tif | 0.83235013 | 9t.tif | 0.8404815 |
| 10.tif | 0.86941963 | 10t.tif | 0.8703763 |