#resnet50\_specific\_layers，两张图片，每层特征值对应的特征距离

1欧式距离：

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Stage1: | Stage2: | Stage3: | Stage4: | Maxpool |
| 1 and 1t | 66.26577 | 42.21426 | 17.937347 | 67.53544 | 3.61021 |
| 2 and 2t | 58.630787 | 41.28221 | 19.288713 | 79.83683 | 3.8821447 |
| 3 and 3t | 70.56912 | 47.031563 | 21.597399 | 123.8869 | 7.0070662 |
| 4 and 4t | 60.276257 | 42.06651 | 17.563417 | 81.14642 | 3.9439766 |
| 5 and 5t | 84.34405 | 56.33801 | 22.51333 | 97.859695 | 5.11534 |
| 1 and 6t | 205.84877 | 151.83716 | 69.96358 | 293.87366 | 22.097628 |
| 2 and 7t | 203.77089 | 148.86285 | 68.31577 | 292.35406 | 24.958727 |
| 3 and 8t | 199.3115 | 150.55359 | 69.13806 | 310.83725 | 24.743572 |
| 4 and 9t | 222.13112 | 164.07144 | 73.01357 | 373.9426 | 31.668516 |
| 5 and 10t | 199.06268 | 145.13472 | 66.57957 | 295.80655 | 21.455896 |

2曼哈顿距离

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Stage1: | Stage2: | Stage3: | Stage4: | Maxpool |
| 1 and 1t | 16355.455 | 7417.9897 | 2051.658 | 10071.368 | 112.030304 |
| 2 and 2t | 15255.457 | 7205.592 | 2147.8945 | 10978.853 | 121.96208 |
| 3 and 3t | 19239.447 | 8782.889 | 2550.3706 | 17881.918 | 226.30513 |
| 4 and 4t | 12655.39 | 6119.748 | 1757.5635 | 11140.082 | 123.98547 |
| 5 and 5t | 25039.66 | 11449.536 | 2857.7268 | 14405.543 | 161.04764 |
| 1 and 6t | 124327.44 | 57382.44 | 13906.265 | 56017.105 | 689.1456 |
| 2 and 7t | 125682.49 | 56866.906 | 13772.755 | 56314.965 | 782.2094 |
| 3 and 8t | 122405.77 | 58602.586 | 14323.626 | 61832.902 | 780.4998 |
| 4 and 9t | 137946.77 | 63457.523 | 15304.539 | 74639.07 | 1007.04443 |
| 5 and 10t | 122934.79 | 55514.742 | 13769.245 | 56204.562 | 668.95074 |

3切比雪夫距离

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Stage1: | Stage2: | Stage3: | Stage4: | Maxpool |
| 1 and 1t | 2.1803281 | 1.7995822 | 0.9377116 | 3.4691567 | 0.47050786 |
| 2 and 2t | 1.3929646 | 1.6324744 | 1.2534672 | 4.3561563 | 0.4777534 |
| 3 and 3t | 1.7904291 | 1.6611012 | 0.9948653 | 5.821281 | 0.8239921 |
| 4 and 4t | 1.7984056 | 2.298288 | 1.2484643 | 6.4855204 | 0.7826841 |
| 5 and 5t | 1.8684353 | 1.6558716 | 1.4643625 | 4.95812 | 0.82405674 |
| 1 and 6t | 3.5156174 | 2.8918514 | 2.6692295 | 10.99859 | 3.8249917 |
| 2 and 7t | 2.338598 | 2.8722384 | 2.5962868 | 16.082096 | 3.4180007 |
| 3 and 8t | 2.42596 | 2.4499974 | 2.3840911 | 10.232569 | 3.1966164 |
| 4 and 9t | 2.2356415 | 3.1229286 | 2.2727563 | 12.442699 | 3.815451 |
| 5 and 10t | 2.6041787 | 3.0459707 | 2.1824915 | 10.063819 | 3.113514 |

4余弦相似度，倒数第二列开始就算不出来了时间过长加输出的是高维向量

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Stage1: | Stage2: | Stage3: | Stage4: | Maxpool |
| 1 and 1t |  |  |  |  | 0.99405843 |
| 2 and 2t |  |  |  |  | 0.99097615 |
| 3 and 3t |  |  |  |  | 0.9748645 |
| 4 and 4t |  |  |  |  | 0.99351203 |
| 5 and 5t |  |  |  |  | 0.9844446 |
| 1 and 6t |  |  |  |  | 0.76954406 |
| 2 and 7t |  |  |  |  | 0.530411 |
| 3 and 8t |  |  |  |  | 0.641153 |
| 4 and 9t |  |  |  |  | 0.54006183 |
| 5 and 10t |  |  |  |  | 0.672121 |

5闵可夫斯基距离，num=2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Stage1: | Stage2: | Stage3: | Stage4: | Maxpool |
| 1 and 1t | 66.26576684434241 | 42.214260898921204 | 17.93734687979071 | 67.53543991513826 | 3.6102099753309367 |
| 2 and 2t | 58.63078829367297 | 41.28221102685302 | 19.28871284869405 | 79.83683005727212 | 3.8821446172474867 |
| 3 and 3t | 70.56912197670097 | 47.03156146076271 | 21.597398021946056 | 123.88690343918522 | 7.0070661574766016 |
| 4 and 4t | 60.27625611118569 | 42.06650763318872 | 17.563418327025015 | 81.14642436669652 | 3.943976752144967 |
| 5 and 5t | 84.34404524772333 | 56.338008408234046 | 22.5133295206088 | 97.85969308785921 | 5.115340270715632 |
| 1 and 6t | 205.84876692307387 | 151.8371609241295 | 69.96357520502187 | 293.8736574831095 | 22.097628284077228 |
| 2 and 7t | 203.77089616773048 | 148.8628576597433 | 68.31577002123119 | 292.3540902099712 | 24.958726916980485 |
| 3 and 8t | 199.31149066850108 | 150.55358784333237 | 69.13805962754884 | 310.83723886062944 | 24.74357136167834 |
| 4 and 9t | 222.13111978063765 | 164.0714342805444 | 73.01357028191745 | 373.94259251922614 | 31.66851587082883 |
| 5 and 10t | 199.06268642063483 | 145.13471651365845 | 66.57956794082926 | 295.8065510177217 | 21.455895897165423 |

Num=4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Stage1: | Stage2: | Stage3: | Stage4: | Maxpool |
| 1 and 1t | 5.933670063931636 | 4.479934825390139 | 2.368989063857553 | 7.698569276795633 | 0.8524221322666479 |
| 2 and 2t | 4.978288558355179 | 4.443301814906302 | 2.7663402012207303 | 10.364479386495804 | 0.9320619893857301 |
| 3 and 3t | 5.799617300048693 | 4.67647483022492 | 2.8746167467982637 | 14.908999010955313 | 1.5742163089770138 |
| 4 and 4t | 5.604146235500155 | 4.896151627309904 | 2.5305651888422425 | 10.913712842508266 | 1.0081927243907938 |
| 5 and 5t | 6.831021201167908 | 5.453115782621169 | 2.9074095396742488 | 11.84407399730281 | 1.2904964035060307 |
| 1 and 6t | 11.231218796207457 | 10.420194063871008 | 6.776716552006857 | 30.26760295390719 | 5.4755233635278335 |
| 2 and 7t | 10.7649564318446 | 10.146769543782668 | 6.655253316685604 | 30.34805001170513 | 5.861269853012399 |
| 3 and 8t | 10.6680946760457 | 9.947568077450915 | 6.495104659192512 | 30.26339280789577 | 5.973376161583042 |
| 4 and 9t | 11.553274661286034 | 11.044231031199047 | 6.768079792305468 | 37.794023453270924 | 7.536746132932727 |
| 5 and 10t | 10.666307990043515 | 9.957695934237103 | 6.297045394804984 | 29.95638704784495 | 5.3346855674934615 |

6杰卡德距离

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Stage1: | Stage2: | Stage3: | Stage4: | Maxpool |
| 1 and 1t | 0.041478336 | 0.08355588 | 0.14615285 | 0.1359539 | 0.0053895116 |
| 2 and 2t | 0.03331697 | 0.0743078 | 0.14036822 | 0.14274776 | 0.0024425983 |
| 3 and 3t | 0.046993017 | 0.0900923 | 0.17040193 | 0.18389553 | 0.0009770393 |
| 4 and 4t | 0.032239616 | 0.065217376 | 0.11076957 | 0.11273342 | 0.002931118 |
| 5 and 5t | 0.060522318 | 0.12728095 | 0.20418167 | 0.1881597 | 0.002449751 |
| 1 and 6t | 0.24324733 | 0.4988292 | 0.6833768 | 0.52088165 | 0.008304834 |
| 2 and 7t | 0.23326683 | 0.49731016 | 0.71253824 | 0.59290475 | 0.0034179688 |
| 3 and 8t | 0.24716055 | 0.5000334 | 0.7017858 | 0.55922496 | 0.00390625 |
| 4 and 9t | 0.26390445 | 0.5158336 | 0.7128478 | 0.57207626 | 0.0034179688 |
| 5 and 10t | 0.23594165 | 0.50207883 | 0.70088184 | 0.60222054 | 0.005859375 |