研究探討

增加真人的人臉可以得出更多組的分類差異，以下分為分為以下四組來比較

1. 日本真人與美國真人
2. 日本漫畫與美國漫畫
3. 日本漫畫與日本真人
4. 美國漫畫與美國真人

可從美日真人的差異再去看美日漫畫的差異，看鼻子還是不是能得到最佳分類效果

也可比較日本的漫畫與真人與美國的漫畫與真人的差異何者較大

真人是採用美國參議院跟日本參議各75人

原因是因為參議院包含各個地區派出的人選，較能代表整個國家平均分散的人種

美國: <https://zh.wikipedia.org/wiki/%E7%AC%AC114%E5%B1%8A%E7%BE%8E%E5%9B%BD%E5%9B%BD%E4%BC%9A#%E5%8F%82%E8%AE%AE%E9%99%A2>

日本:

https://www.sangiin.go.jp/japanese/joho1/kousei/giin/201/giin.htm

以下為圖檔

日本漫畫人臉<https://figshare.com/s/8d083eaadf26ebe246bd>

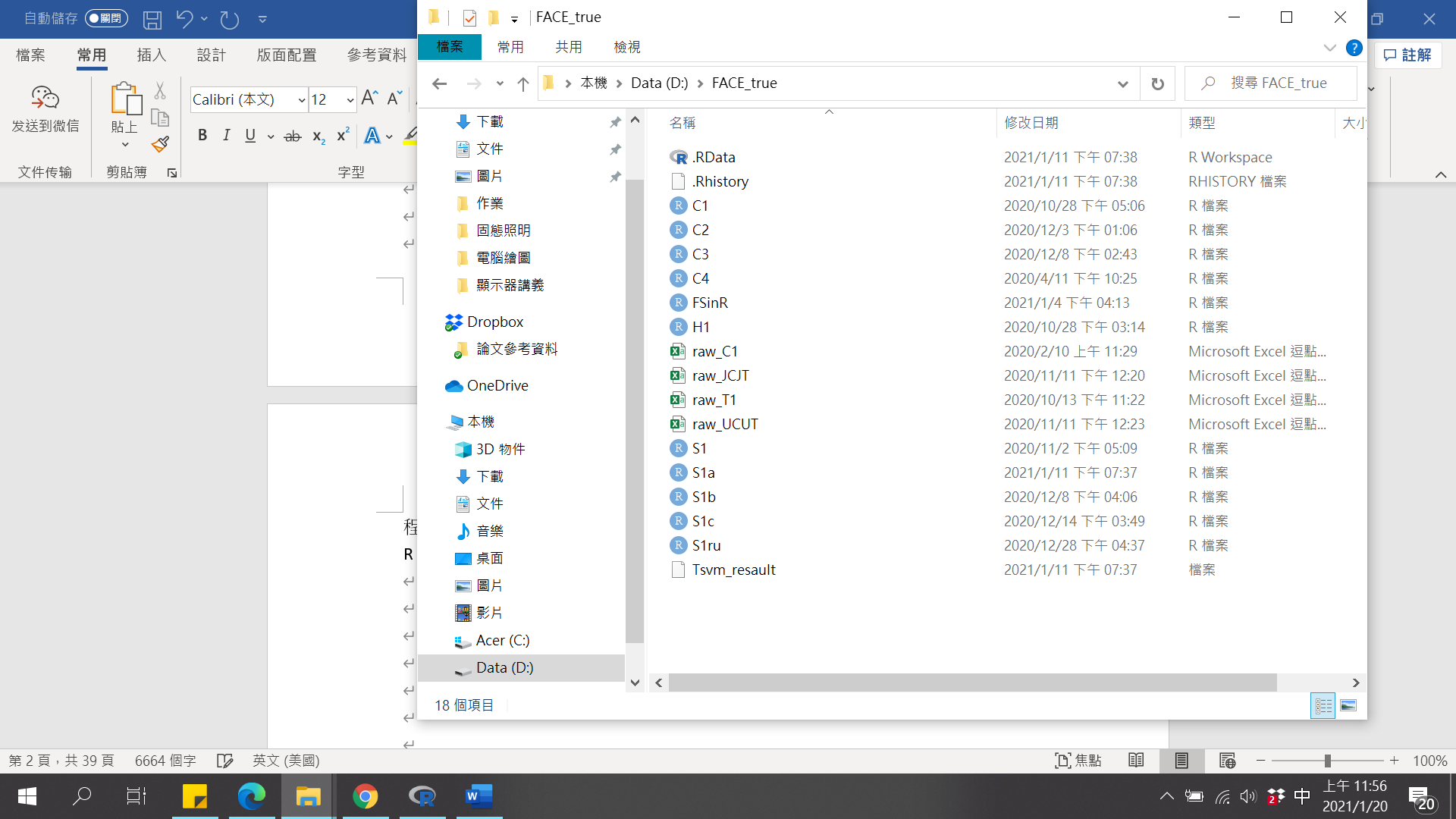
美國漫畫人臉[https://figshare.com/s/d823b5afac45f87ae615](https://figshare.com/s/d823b5afac45f87ae615" \t "_blank)

日本真人人臉[https://figshare.com/s/8d6936a65d1bf34b26b8](https://figshare.com/s/8d6936a65d1bf34b26b8" \t "_blank)

美國真人人臉[https://figshare.com/s/fc64236e461a325e37c9](https://figshare.com/s/fc64236e461a325e37c9" \t "_blank)

程式碼來源

R code 資料夾目錄 D槽FACE\_true



C1~C4是只有卡通時期的程式碼

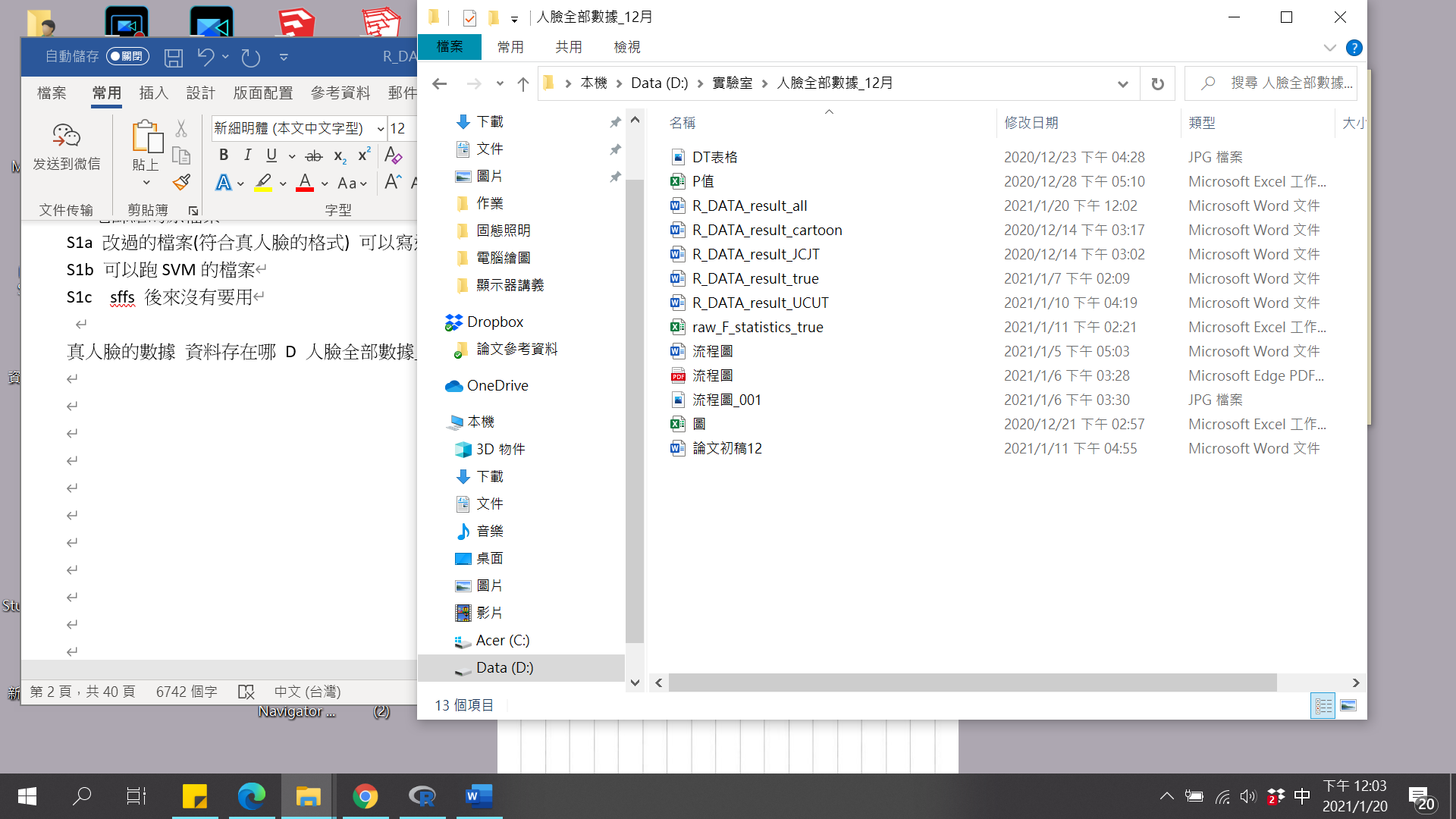
S1 老師給的原檔案

S1a 改過的檔案(符合真人臉的格式) 可以寫進去excel

S1b 可以跑SVM的檔案

S1c sffs 後來沒有要用

真人臉的數據 資料存在哪 D 人臉全部數據\_12月



論文初稿12

是2020/12月整理的所有重要資料

R\_DATA\_result\_all

附錄原檔，資料都在裡面

R\_DATA\_result\_cartoon 卡通的數據

R\_DATA\_result\_JCJT 日本真人日本卡通的數據

R\_DATA\_result\_true 真人人臉的數據

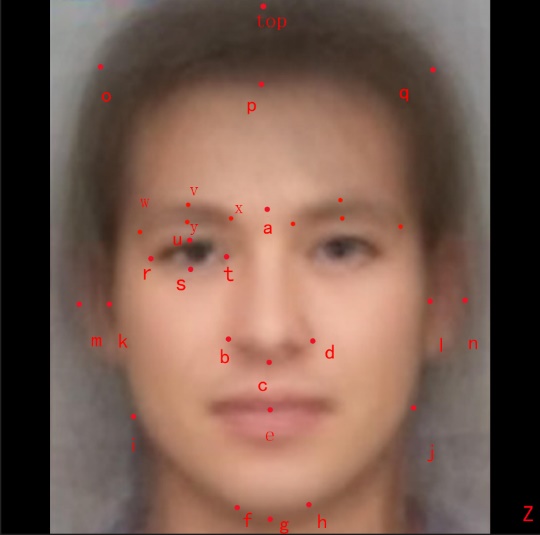
R\_DATA\_result\_UCUT 美國真人跟美國卡通的數據

raw\_F\_statistics\_true 所有四類的統計差異 平均值跟標準差

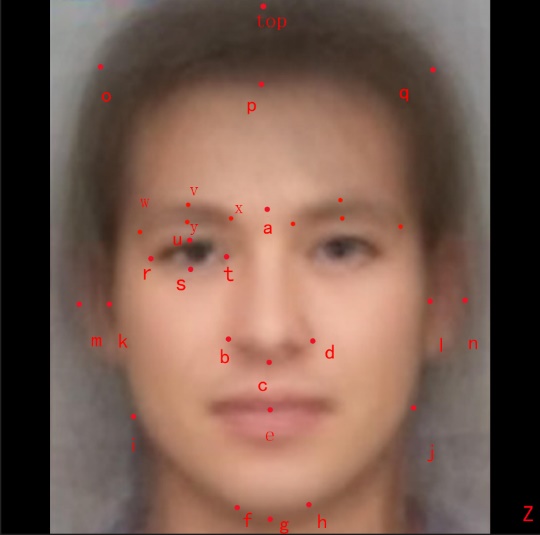
流程圖WORD 流程圖的原檔案

圖表excel 單一數據跟五官數據的點線圖

R DATA表格



|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 長度參數定義 | | | 面積參數定義 | | | 角度參數定義 | | |
| LA2 | nose |  | R1 | nose | abcd | A1 | nose | ∠abd |
| LA8 | faceL |  | R2 | faceR | aigj | A2 | faceA | ∠aig |
| LA9 | faceL |  | R3 | chin | ifgj | A3 | ear | ∠alc |
| LB3 | nose |  | R4 | faceR | okeq | A4 | nose | ∠bcd |
| LA3 | mouth |  | R5 | faceR | pkgl | A5 | chin | ∠fgh |
| LA10 | faceL |  | R6 | eye | rstu | A6 | chin | ∠hgz |
| LB5 | chin |  |  |  |  | A7 | chin | ∠igz |
| LB4 | jaw |  |  |  |  | A8 | chin | ∠jgz |
| LB2 | faceL |  |  |  |  | A9 | faceA | ∠kig |
| LB6 | ear |  |  |  |  | A10 | faceA | ∠lcz |
| LB1 | faceL |  |  |  |  | A11 | faceA | ∠lez |
| LA1 | faceL |  |  |  |  | A12 | faceA | ∠qaz |
| LA5 | faceL |  |  |  |  | A13 | faceA | ∠qpz |
| LA6 | faceL |  |  |  |  | A14 | eyebrow | ∠pwy |
| LA7 | faceL |  |  |  |  | A15 | eyebrow | ∠vwy |
| LA11 | eye |  |  |  |  | A16 | eyebrow | ∠pxy |
| LA4 | mouth |  |  |  |  | A17 | eyebrow | ∠vxy |
| LA12 | eyebrow |  |  |  |  |  |  |  |
| LB7 | eyebrow |  |  |  |  |  |  |  |

**Excel number**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | country |  |  | **27** | A1 | nose | abd |
| **2** | LA2 | nose | ac | **28** | A2 | faceA | aig |
| **3** | LA8 | faceL | ae | **29** | A3 | ear | alc |
| **4** | LA9 | faceL | ag | **30** | A4 | nose | bcd |
| **5** | LB3 | nose | bd | **31** | A5 | chin | fgh |
| **6** | LA3 | mouth | ce | **32** | A6 | chin | hgz |
| **7** | LA10 | faceL | cg | **33** | A7 | chin | igz |
| **8** | LB5 | chin | fh | **34** | A8 | chin | jgz |
| **9** | LB4 | jaw | ij | **35** | A9 | faceA | kig |
| **10** | LB2 | faceL | kl | **36** | A10 | faceA | lcz |
| **11** | LB6 | ear | mk | **37** | A11 | faceA | lez |
| **12** | LB1 | faceL | oq | **38** | A12 | faceA | qaz |
| **13** | LA1 | faceL | pa | **39** | A13 | faceA | qpz |
| **14** | LA5 | faceL | pc | **40** | A14 | eyebrow | pwy |
| **15** | LA6 | faceL | pe | **41** | A15 | eyebrow | vwy |
| **16** | LA7 |  | pg | **42** | A16 | eyebrow | pxy |
| **17** | LA11 | eye | us | **43** | A17 | eyebrow | vxy |
| **18** | LA4 | mouth | eg |  |  |  |  |
| **19** | LA12 | eyebrow | vy |  |  |  |  |
| **20** | LB7 | eyebrow | wx |  |  |  |  |
| **21** | R1 | nose | abcd |  |  |  |  |
| **22** | R2 | faceR | aigj |  |  |  |  |
| **23** | R3 | chin | ifgj |  |  |  |  |
| **24** | R4 | faceR | okeq |  |  |  |  |
| **25** | R5 | faceR | pkgl |  |  |  |  |
| **26** | R6 | eye | rstu |  |  |  |  |

Table 五官組合

|  |  |  |
| --- | --- | --- |
| 五官 |  |  |
| Nose | 2,5,21,27,30 | LA2, LB3, R1, A1, A4 |
| Eye | 17,26 | LA11, R6 |
| Eyebrow | 19,20,40,41,42,43 | LA12, LB7, A14, A15, A16, A17 |
| Ear | 11,29 | LB6, A3 |
| Mouth | 6,18 | LA3, LA4 |
| FaceL | 3,4,7,10,12,13,14,15 | LA8, LA9, LA10, LB2, LB1, LA1, LA5, LA6 |
| FaceR | 22,24,25 | R2, R4, R5 |
| FaceA | 28,35,36,37,38,39 | A2, A9, A10, A11, A12, A13 |
| Chin | 8,9,23,31,32,33,34 | LB5, LB4, R3, A5, A6, A7, A8 |
|  |  |  |

|  |  |
| --- | --- |
| 五官 |  |
| Nose | LA2, LB3, R1, A1, A4 |
| Eye | LA11, R6 |
| Eyebrow | LA12, LB7, A14, A15, A16, A17 |
| Ear | LB6, A3 |
| Mouth | LA3, LA4 |
| FaceL | LA8, LA9, LA10, LB2, LB1, LA1, LA5, LA6 |
| FaceR | R2, R4, R5 |
| FaceA | A2, A9, A10, A11, A12, A13 |
| Chin | LB5, LB4, R3, A5, A6, A7, A8 |
|  |  |

結果來源raw\_F\_statistics.excel

Data :raw\_F\_statistics\_true(.xlsx)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Features | Japan\_c | USA\_c | Features | Japan\_c | USA\_c | Features | Japan\_c | USA\_c |
|  | mean(std) | mean(std) |  | mean(std) | mean(std) |  | mean(std) | mean(std) |
| LA2 | 0.384 | 0.408 | LA7 | 1.000 | 1.000 | A4 | 134.433 | 127.486 |
| (0.100) | 0.113 | 0.000 | 0.000 | 23.449 | 28.415 |
| LA8 | 1.306 | 0.539 | LA11 | 0.169 | 0.149 | A5\* | 144.066 | 153.260 |
| 6.708 | 0.135 | 0.077 | 0.072 | 28.418 | 24.291 |
| LA9\*\* | 0.735 | 0.794 | LA4 | 0.979 | 0.256 | A6 | 19.963 | 14.521 |
| 0.119 | 0.122 | 6.690 | 0.110 | 28.011 | 11.292 |
| LB3\*\*\* | 0.118 | 0.205 | LA12 | 0.033 | 0.093 | A7 | 149.746 | 150.289 |
| 0.062 | 0.074 | 0.016 | 0.417 | 7.261 | 12.570 |
| LA3 | 0.922 | 0.133 | LB7 | 0.241 | 0.257 | A8\* | 31.756 | 34.923 |
| 6.725 | 0.079 | 0.065 | 0.082 | 7.893 | 9.780 |
| LA10\* | 0.351 | 0.387 | R1\*\*\* | 0.022 | 0.043 | A9 | 133.888 | 131.823 |
| 0.080 | 0.104 | 0.013 | 0.022 | 11.191 | 17.804 |
| LB5\* | 0.211 | 0.274 | R2\*\* | 0.250 | 0.298 | A10\*\* | 45.238 | 51.905 |
| 0.119 | 0.173 | 0.079 | 0.100 | 10.961 | 13.859 |
| LB4\*\* | 0.667 | 0.745 | R3\*\* | 0.075 | 0.095 | A11\*\* | 50.884 | 57.286 |
| 0.141 | 0.194 | 0.036 | 0.048 | 10.370 | 12.953 |
| LB2 | 0.815 | 0.847 | R4 | 0.780 | 0.430 | A12 | 90.006 | 87.246 |
| 0.128 | 0.214 | 2.311 | 0.183 | 11.027 | 13.214 |
| LB6 | 0.133 | 0.113 | R5 | 0.406 | 0.424 | A13\*\* | 72.217 | 65.383 |
| 0.111 | 0.052 | 0.062 | 0.107 | 12.169 | 14.268 |
| LB1\*\* | 0.849 | 0.743 | R6 | 0.017 | 0.016 | A14\*\* | 36.956 | 26.833 |
| 0.171 | 0.252 | 0.013 | 0.012 | 20.871 | 17.514 |
| LA1\*\* | 0.275 | 0.212 | A1\*\*\* | 80.567 | 72.956 | A15\*\* | 15.100 | 19.533 |
| 0.096 | 0.110 | 12.010 | 9.255 | 9.209 | 9.853 |
| LA5\* | 0.650 | 0.613 | A2 | 88.063 | 87.058 | A16\* | 113.961 | 123.066 |
| 0.080 | 0.104 | 9.015 | 16.875 | 26.063 | 25.679 |
| LA6 | 1.571 | 0.745 | A3 | 47.721 | 51.712 | A17\* | 16.253 | 22.178 |
| 6.737 | 0.111 | 9.898 | 16.935 | 10.259 | 19.548 |

p-value 以\*來表示

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Features | Japan\_t | USA\_t | Features | Japan\_t | USA\_t | Features | Japan\_t | USA\_t |
|  | mean(std) | mean(std) |  | mean(std) | mean(std) |  | mean(std) | mean(std) |
| LA2 | 0.408 | 0.287 | LA7 | 1.000 | 1.000 | A4 | 137.240 | 135.750 |
| 0.631 | 0.030 | 0.000 | 0.000 | 10.587 | 15.041 |
| LA8 | 0.543 | 0.492 | LA11 | 0.066 | 0.054 | A5\*\* | 142.796 | 150.906 |
| 0.826 | 0.799 | 0.091 | 0.015 | 18.910 | 10.474 |
| LA9 | 0.822 | 0.644 | LA4 | 0.280 | 0.331 | A6\*\* | 18.710 | 14.615 |
| 1.199 | 0.047 | 0.374 | 0.745 | 9.399 | 5.189 |
| LB3 | 0.257 | 0.230 | LA12 | 0.050 | 0.040 | A7 | 144.081 | 145.348 |
| 0.360 | 0.102 | 0.073 | 0.008 | 6.643 | 4.699 |
| LA3 | 0.135 | 0.204 | LB7 | 0.235 | 0.203 | A8 | 35.979 | 34.966 |
| 0.197 | 0.799 | 0.339 | 0.025 | 6.361 | 4.759 |
| LA10 | 0.414 | 0.356 | R1 | 0.164 | 0.034 | A9 | 136.683 | 135.083 |
| 0.569 | 0.030 | 1.107 | 0.017 | 15.595 | 13.793 |
| LB5 | 0.256 | 0.239 | R2 | 0.987 | 0.196 | A10 | 50.350 | 48.692 |
| 0.346 | 0.167 | 6.735 | 0.028 | 13.601 | 6.161 |
| LB4 | 0.745 | 0.615 | R3 | 0.333 | 0.074 | A11 | 56.519 | 54.308 |
| 1.152 | 0.079 | 2.183 | 0.018 | 15.633 | 8.426 |
| LB2 | 0.855 | 0.703 | R4 | 1.803 | 0.395 | A12 | 98.418 | 98.096 |
| 1.316 | 0.123 | 12.244 | 0.299 | 5.401 | 4.305 |
| LB6 | 0.084 | 0.085 | R5 | 0.432 | 0.350 | A13\*\*\* | 70.310 | 63.512 |
| 0.104 | 0.090 | 0.656 | 0.062 | 9.076 | 10.115 |
| LB1 | 0.808 | 0.663 | R6 | 0.016 | 0.004 | A14\*\*\* | 44.872 | 51.530 |
| 1.154 | 0.101 | 0.106 | 0.001 | 8.299 | 7.380 |
| LA1 | 0.446 | 0.356 | A1\*\*\* | 69.655 | 64.834 | A15 | 20.426 | 19.627 |
| 1.126 | 0.047 | 2.579 | 6.096 | 4.879 | 3.755 |
| LA5 | 0.700 | 0.644 | A2 | 91.106 | 89.169 | A16\*\*\* | 107.930 | 102.749 |
| 0.419 | 0.030 | 11.281 | 7.276 | 11.772 | 6.101 |
| LA6 | 0.786 | 0.848 | A3\*\*\* | 50.625 | 43.991 | A17 | 25.408 | 23.212 |
| 0.199 | 0.802 | 12.212 | 9.614 | 9.495 | 4.016 |

JcJt

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Features | Japan\_c | Japan\_t | Features | Japan\_c | Japan\_t | Features | Japan\_c | Japan\_t |
|  | mean(std) | mean(std) |  | mean(std) | mean(std) |  | mean(std) | mean(std) |
| LA2 | 0.384 | 0.408 | LA7 | 1.000 | 1.000 | A4 | 134.433 | 137.240 |
| 0.100 | 0.631 | 0.000 | 0.000 | 23.449 | 10.587 |
| LA8 | 1.306 | 0.543 | LA11\*\*\* | 0.169 | 0.066 | A5 | 144.066 | 142.796 |
| 6.708 | 0.826 | 0.077 | 0.091 | 28.418 | 18.910 |
| LA9 | 0.735 | 0.822 | LA4 | 0.979 | 0.280 | A6 | 19.963 | 18.710 |
| 0.119 | 1.199 | 6.690 | 0.374 | 28.011 | 9.399 |
| LB3\*\* | 0.118 | 0.257 | LA12 | 0.033 | 0.050 | A7\*\*\* | 149.746 | 144.081 |
| 0.062 | 0.360 | 0.016 | 0.073 | 7.261 | 6.643 |
| LA3 | 0.922 | 0.135 | LB7 | 0.241 | 0.235 | A8\*\*\* | 31.756 | 35.979 |
| 6.725 | 0.197 | 0.065 | 0.339 | 7.893 | 6.361 |
| LA10 | 0.351 | 0.414 | R1 | 0.022 | 0.164 | A9 | 133.888 | 136.683 |
| 0.080 | 0.569 | 0.013 | 1.107 | 11.191 | 15.595 |
| LB5 | 0.211 | 0.256 | R2 | 0.250 | 0.987 | A10\* | 45.238 | 50.350 |
| 0.119 | 0.346 | 0.079 | 6.735 | 10.961 | 13.601 |
| LB4 | 0.667 | 0.745 | R3 | 0.075 | 0.333 | A11\* | 50.884 | 56.519 |
| 0.141 | 1.152 | 0.036 | 2.183 | 10.370 | 15.633 |
| LB2 | 0.815 | 0.855 | R4 | 0.780 | 1.803 | A12\*\*\* | 90.006 | 98.418 |
| 0.128 | 1.316 | 2.311 | 12.244 | 11.027 | 5.401 |
| LB6\*\* | 0.133 | 0.084 | R5 | 0.406 | 0.432 | A13 | 72.217 | 70.310 |
| 0.111 | 0.104 | 0.062 | 0.656 | 12.169 | 9.076 |
| LB1 | 0.849 | 0.808 | R6 | 0.017 | 0.016 | A14\*\* | 36.956 | 44.872 |
| 0.171 | 1.154 | 0.013 | 0.106 | 20.871 | 8.299 |
| LA1 | 0.275 | 0.446 | A1 | 80.567 | 69.655 | A15\*\*\* | 15.100 | 20.426 |
| 0.096 | 1.126 | 12.010 | 2.579 | 9.209 | 4.879 |
| LA5 | 0.650 | 0.700 | A2 | 88.063 | 91.106 | A16 | 113.961 | 107.930 |
| 0.080 | 0.419 | 9.015 | 11.281 | 26.063 | 11.772 |
| LA6 | 1.571 | 0.786 | A3 | 47.721 | 50.625 | A17\*\*\* | 16.253 | 25.408 |
| 6.737 | 0.199 | 9.898 | 12.212 | 10.259 | 9.495 |

UcUt

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Features | USA\_c | USA\_t | Features | USA\_c | USA\_t | Features | USA\_c | USA\_t |
|  | mean(std) | mean(std) |  | mean(std) | mean(std) |  | mean(std) | mean(std) |
| LA2 | 0.384 | 0.408 | LA7 | 1.000 | 1.000 | A4 | 127.486 | 135.75 |
| 0.100 | 0.113 | 0.000 | 0.000 | 28.415 | 15.041 |
| LA8 | 1.306 | 0.539 | LA11\*\*\* | 0.149 | 0.054 | A5 | 153.260 | 150.906 |
| 6.708 | 0.135 | 0.072 | 0.015 | 24.291 | 10.474 |
| LA9 | 0.735 | 0.794 | LA4 | 0.256 | 0.331 | A6 | 14.521 | 14.615 |
| 0.119 | 0.122 | 0.110 | 0.745 | 11.292 | 5.189 |
| LB3\*\* | 0.118 | 0.205 | LA12 | 0.093 | 0.04 | A7\*\*\* | 150.289 | 145.348 |
| 0.062 | 0.074 | 0.417 | 0.008 | 12.570 | 4.699 |
| LA3 | 0.922 | 0.133 | LB7 | 0.257 | 0.203 | A8\*\*\* | 34.923 | 34.966 |
| 6.725 | 0.079 | 0.082 | 0.025 | 9.780 | 4.759 |
| LA10 | 0.351 | 0.387 | R1 | 0.043 | 0.034 | A9 | 131.823 | 135.083 |
| 0.080 | 0.104 | 0.022 | 0.017 | 17.804 | 13.793 |
| LB5 | 0.211 | 0.274 | R2 | 0.298 | 0.196 | A10\* | 51.905 | 48.692 |
| 0.119 | 0.173 | 0.100 | 0.028 | 13.859 | 6.161 |
| LB4 | 0.667 | 0.745 | R3 | 0.095 | 0.074 | A11\* | 57.286 | 54.308 |
| 0.141 | 0.194 | 0.048 | 0.018 | 12.953 | 8.426 |
| LB2 | 0.815 | 0.847 | R4 | 0.430 | 0.395 | A12\*\*\* | 87.246 | 98.096 |
| 0.128 | 0.214 | 0.183 | 0.299 | 13.214 | 4.305 |
| LB6\*\* | 0.133 | 0.113 | R5 | 0.424 | 0.35 | A13 | 65.383 | 63.512 |
| 0.111 | 0.052 | 0.107 | 0.062 | 14.268 | 10.115 |
| LB1 | 0.849 | 0.743 | R6 | 0.016 | 0.004 | A14\*\* | 26.833 | 51.53 |
| 0.171 | 0.252 | 0.012 | 0.001 | 17.514 | 7.38 |
| LA1 | 0.275 | 0.212 | A1 | 72.956 | 64.834 | A15\*\*\* | 19.533 | 19.627 |
| 0.096 | 0.11 | 9.255 | 6.096 | 9.853 | 3.755 |
| LA5 | 0.650 | 0.613 | A2 | 87.058 | 89.169 | A16 | 123.066 | 102.749 |
| 0.080 | 0.104 | 16.875 | 7.276 | 25.679 | 6.101 |
| LA6 | 1.571 | 0.745 | A3 | 51.712 | 43.991 | A17\*\*\* | 22.178 | 23.212 |

p-value 數字

**JcJt: japan\_cartoon跟japan\_true之間的ttest**

**UcUt: USA\_cartoon跟USA\_true之間的ttest**

**位數後三位**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Features | Japan\_c | USA\_c | Japan\_t | USA\_t | **ttest** | **ttest** | **ttest** | **ttest** |
| **country** | mean(std) | mean(std) | mean(std) | mean(std) | p-value(JU\_c) | p-value(JU\_t) | p-value(JcJt) | p-value(UcUt) |
| LA2 | 0.384 | 0.408 | 0.408 | 0.287 | 0.176 | 0.100 | 0.746 | <0.001\*\*\* |
| (0.100) | (0.113) | (0.631) | (0.030) |
| LA8 | 1.306 | 0.539 | 0.543 | 0.492 | 0.321 | 0.701 | 0.329 | 0.613 |
| (6.708) | (0.135) | (0.826) | (0.799) |
| LA9 | 0.735 | 0.794 | 0.822 | 0.644 | 0.006\*\* | 0.199 | 0.330 | <0.001\*\*\* |
| (0.119) | (0.122) | (1.199) | (0.047) |
| LB3 | 0.118 | 0.205 | 0.257 | 0.230 | <0.001\*\*\* | 0.532 | >0.001\*\* | 0.082 |
| (0.062) | (0.074) | (0.360) | (0.102) |
| LA3 | 0.922 | 0.133 | 0.135 | 0.204 | 0.309 | 0.466 | 0.313 | 0.442 |
| (6.725) | (0.079) | (0.197) | (0.799) |
| LA10 | 0.351 | 0.387 | 0.414 | 0.356 | 0.041\* | 0.380 | 0.338 | 0.015\* |
| (0.080) | (0.104) | (0.569) | (0.030) |
| LB5 | 0.211 | 0.274 | 0.256 | 0.239 | 0.010\* | 0.703 | 0.281 | 0.219 |
| (0.119) | (0.173) | (0.346) | (0.167) |
| LB4 | 0.667 | 0.745 | 0.745 | 0.615 | 0.006\*\* | 0.332 | 0.332 | <0.001\*\*\* |
| (0.141) | (0.194) | (1.152) | (0.079) |
| LB2 | 0.815 | 0.847 | 0.855 | 0.703 | 0.257 | 0.322 | 0.792 | <0.001\*\*\* |
| (0.128) | (0.214) | (1.316) | (0.123) |
| LB6 | 0.133 | 0.113 | 0.084 | 0.085 | 0.157 | 0.971 | 0.006\*\* | 0.022\* |
| (0.111) | (0.052) | (0.104) | (0.090) |
| LB1 | 0.849 | 0.743 | 0.808 | 0.663 | 0.003\*\* | 0.282 | 0.759 | 0.011\* |
| (0.171) | (0.252) | (1.154) | (0.101) |
| LA1 | 0.275 | 0.212 | 0.446 | 0.356 | <0.001\*\*\* | 0.492 | 0.191 | <0.001\*\*\* |
| (0.096) | (0.110) | (1.126) | (0.047) |
| LA5 | 0.650 | 0.613 | 0.700 | 0.644 | 0.018\* | 0.251 | 0.311 | 0.016\* |
| (0.080) | (0.104) | (0.419) | (0.030) |
| LA6 | 1.571 | 0.745 | 0.786 | 0.848 | 0.289 | 0.518 | 0.315 | 0.271 |
| (6.737) | (0.111) | (0.199) | (0.802) |
| LA7 | 1.000 | 1.000 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| (0.000) | (0.000) | (0.000) | (0.000) |
| LA11 | 0.169 | 0.149 | 0.066 | 0.054 | 0.089 | 0.288 | <0.001\*\*\* | <0.001\*\*\* |
| (0.077) | (0.072) | (0.091) | (0.015) |
| LA4 | 0.979 | 0.256 | 0.280 | 0.331 | 0.351 | 0.597 | 0.368 | 0.392 |
| (6.690) | (0.110) | (0.374) | (0.745) |
| LA12 | 0.033 | 0.093 | 0.050 | 0.040 | 0.217 | 0.236 | 0.056 | 0.271 |
| (0.016) | (0.417) | (0.073) | (0.008) |
| LB7 | 0.241 | 0.257 | 0.235 | 0.203 | 0.189 | 0.416 | 0.881 | <0.001\*\*\* |
| (0.065) | (0.082) | (0.339) | (0.025) |
| R1 | 0.022 | 0.043 | 0.164 | 0.034 | <0.001\*\*\* | 0.310 | 0.269 | 0.008\* |
| (0.013) | (0.022) | (1.107) | (0.017) |
| R2 | 0.250 | 0.298 | 0.987 | 0.196 | >0.001\*\* | 0.311 | 0.344 | <0.001\*\*\* |
| (0.079) | (0.100) | (6.735) | (0.028) |
| R3 | 0.075 | 0.095 | 0.333 | 0.074 | 0.003\*\* | 0.307 | 0.307 | >0.001\*\* |
| (0.036) | (0.048) | (2.183) | (0.018) |
| R4 | 0.780 | (0.430 | 1.803 | 0.395 | 0.194 | 0.321 | 0.478 | 0.393 |
| (2.311) | 0.183) | (12.244) | (0.299) |
| R5 | 0.406 | (0.424 | 0.432 | 0.350 | 0.228 | 0.286 | 0.736 | <0.001\*\*\* |
| (0.062) | 0.107) | (0.656) | (0.062) |
| R6 | 0.017 | 0.016 | 0.016 | 0.004 | 0.450 | 0.316 | 0.935 | <0.001\*\*\* |
| (0.013) | (0.012) | (0.106) | (0.001) |
| A1 | 80.567 | 72.956 | 69.655 | 64.834 | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* | <0.001\*\*\* |
| (12.010) | (9.255) | (2.579) | (6.096) |
| A2 | 88.063 | 87.058 | 91.106 | 89.169 | 0.649 | 0.213 | 0.070 | 0.321 |
| (9.015) | (16.875) | (11.281) | (7.276) |
| A3 | 47.721 | 51.712 | 50.625 | 43.991 | 0.080 | <0.001\*\*\* | 0.112 | <0.001\*\*\* |
| (9.898) | (16.935) | (12.212) | (9.614) |
| A4 | 134.433 | 127.486 | 137.240 | 135.750 | 0.105 | 0.484 | 0.346 | 0.028\* |
| (23.449) | (28.415) | (10.587) | (15.041) |
| A5 | 144.066 | 153.260 | 142.796 | 150.906 | 0.035\* | >0.001\*\* | 0.748 | 0.442 |
| (28.418) | (24.291) | (18.910) | (10.474) |
| A6 | 19.963 | 14.521 | 18.710 | 14.615 | 0.121 | >0.001\*\* | 0.714 | 0.948 |
| (28.011) | (11.292) | (9.399) | (5.189) |
| A7 | 149.746 | 150.289 | 144.081 | 145.348 | 0.747 | 0.180 | <0.001\*\*\* | 0.002\*\* |
| (7.261) | (12.570) | (6.643) | (4.699) |
| A8 | 31.756 | 34.923 | 35.979 | 34.966 | 0.031\* | 0.271 | <0.001\*\*\* | 0.973 |
| (7.893) | (9.780) | (6.361) | (4.759) |
| A9 | 133.888 | 131.823 | 136.683 | 135.083 | 0.396 | 0.507 | 0.209 | 0.212 |
| (11.191) | (17.804) | (15.595) | (13.793) |
| A10 | 45.238 | 51.905 | 50.350 | 48.692 | >0.001\*\* | 0.338 | 0.012\* | 0.069 |
| (10.961) | (13.859) | (13.601) | (6.161) |
| A11 | 50.884 | 57.286 | 56.519 | 54.308 | >0.001\*\* | 0.283 | 0.010\* | 0.097 |
| (10.370) | (12.953) | (15.633) | (8.426) |
| A12 | 90.006 | 87.246 | 98.418 | 98.096 | 0.167 | 0.687 | <0.001\*\*\* | <0.001\*\*\* |
| (11.027) | (13.214) | (5.401) | (4.305) |
| A13 | 72.217 | 65.383 | 70.310 | 63.512 | 0.002 | <0.001\*\*\* | 0.279 | 0.356 |
| (12.169) | (14.268) | (9.076) | (10.115) |
| A14 | 36.956 | 26.833 | 44.872 | 51.530 | 0.002\*\* | <0.001\*\*\* | 0.003\*\* | <0.001\*\*\* |
| (20.871) | (17.514) | (8.299) | (7.380) |
| A15 | 15.100 | 19.533 | 20.426 | 19.627 | 0.005\*\* | 0.263 | <0.001\*\*\* | 0.939 |
| (9.209) | (9.853) | (4.879) | (3.755) |
| A16 | 113.961 | 123.066 | 107.930 | 102.749 | 0.033\* | <0.001\*\*\* | 0.069 | <0.001\*\*\* |
| (26.063) | (25.679) | (11.772) | (6.101) |
| A17 | 16.253 | 22.178 | 25.408 | 23.212 | 0.021\* | 0.067 | <0.001\*\*\* | 0.654 |
| (10.259) | (19.548) | (9.495) | (4.016) |

依照國別，真人或漫畫所作的敘述統計與檢定，分別列如Table-, Table-, Table-.

漫畫人臉以國別而言，美國人物比日本人物長度參數較長的包含LA2, LA8, LA9, LB3, LA10, LB5, LB4, LB2, LA6, LA12, LB7角度與面積較大的包含R1, R2, R3, R5, A3, A5, A10, A11, A15, A17;美國人物比日本人物長度參數較短的參數有LA3, LB6, LB1, LA1, LA5 , LA11, LA4,角度與面積較小的包含 R4 , R6, A1 , A2, A4, A6, A7, A8, A9 , A12, A13, A14, A16;

真人人臉以國別而言，美國人物比日本人物長度參數較長的包含LA3, LB6, LA6, LA4角度與面積較大的包含R3, R4, A5, A7, A14; 美國人物比日本人物長度參數較短的參數有 LA2 , LA8, LA9, LB3, LA10, LB5, LB4, LB2, LB1, LA1, LA5, LA11, LA12, LB7角度與面積較小的包含R1, R2, R5, R6, A1, A2, A3, A4, A6, A8, A9, A10, A11, A12, A13, A15, A16, A17;

日本以漫畫和真人來比較時，真人比漫畫人物長度參數較長的包含LA2,LA9, LA10, LB5, LB4, LB2, LA1, LA5, LA12角度與面積較大的包含R2, R3, R4, R5, A2, A3 ,A4, A8, A9, A10, A11, A12, A15, A17;真人比漫畫人物長度參數較短的參數有LA8, LB3, LA3, LB6, LB1, LA6, LA11, LA4, LB7角度與面積較小的包含R1, R6, A1, A5, A6, A7, A13, A14, A16;

美國以漫畫和真人來比較時，真人比漫畫人物長度參數較長的包含LA2, LA9, LB3, LA10, LB5, LB4, LB2, LA4角度與面積較大的包含R6, A2, A4, A6, A8, A9, A12, A14, A15, A17; 真人比漫畫人物長度參數較短的參數有 LA8, LA3, LB6, LB1, LA1, LA5, LA6, LA11, LA12, LB7,角度與面積較小的包含R1, R2, R3, R4, R5, A1, A3, A5, A7, A10, A11, A13, A16;

整理p-value

Data :raw\_F\_statistics\_true(.xlsx)

**JcJt: japan\_cartoon跟japan\_true之間的ttest**

**UcUt: USA\_cartoon跟USA\_true之間的ttest**

|  |  |  |  |
| --- | --- | --- | --- |
| Features | Length | Angle | Area |
| JU\_c | LA9\*\* LB3\*\*\* LA10\* LB5\*  LB4\*\* LB1\*\* LA1\*\* LA5\* | R1\*\*\* R2\*\* R3\*\* | A1\*\*\* A5\* A8\* A10\*\* A11\*\* A13\*\* A14\*\* A15\*\* A16\* A17\* |
| JU\_t |  |  | A1\*\*\* A3\*\*\* A5\*\* A6\*\* A13\*\*\* A14\*\*\* A16\*\*\* |
| Jt\_Jc | LB3\*\* LB6\*\* LA11\*\*\* |  | A1\*\*\* A7\*\*\* A8\*\*\* A10\* A11\* A12\*\*\* A14\*\*  A15\*\*\* A17\*\*\* |
| Ut\_Uc | LA2\*\*\* LA9\*\*\* LA10\* LA10\* LB4\*\*\* LB2\*\*\* LB6\* LB1\* LA1\*\*\* LA5\* LB7\*\*\* | R1\* R2\*\*\* R3\*\* R5\*\*\* R6\*\*\* | A1\*\*\* A3\*\*\* A4\* A7\*\* A7\*\* A14\*\*\* A16\*\*\* |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Features | Length | | | Area | | | Angle | | |
|  | \* | \*\* | \*\*\* | \* | \*\* | \*\*\* | \* | \*\* | \*\*\* |
| JU\_c | LA10 LB5 LA5 | LA9  LB4  LB1  LA1 | LB3 |  | R2  R3 | R1 | A5  A8 A16 A17 | A10  A11  A13  A14  A15 | A1 |
| JU\_t |  |  |  |  |  |  |  | A5  A6 | A1  A3  A13  A14  A16 |
| Jt\_Jc |  | **LB3**  LB6 | **LA11** |  |  |  | A10 A11 | A14 | A1  A7  A8  A12 A15 A17 |
| Ut\_Uc | LA10 LB6 LB1 LA5 |  | LA1  LA2  LA9  LB4  LB2  LB7  LA1 | **R1** | **R3** | **R2**  **R5**  **R6** | A4 | A7 | A1  A3  A12 A14 A16 |

日本跟美國有統計差異的地方不一樣，由此可見所誇示的地方不一樣

美日之間真人的差異比卡通的小，由此可見卡通的誇示較大

Results:

參數統計與檢定

依照國別，真人或漫畫所作的敘述統計與檢定，分別列如Table-, Table-, Table-.

漫畫人臉以國別而言，美國人物比日本人物長度參數較長的包含LA2, LA8, LA9, LB3, LA10, LB5, LB4, LB2, LA6, LA12, LB7角度與面積較大的包含R1, R2, R3, R5, A3, A5, A10, A11, A15, A17;美國人物比日本人物長度參數較短的參數有LA3, LB6, LB1, LA1, LA5 , LA11, LA4,角度與面積較小的包含 R4 , R6, A1 , A2, A4, A6, A7, A8, A9 , A12, A13, A14, A16;

真人人臉以國別而言，美國人物比日本人物長度參數較長的包含LA3, LB6, LA6, LA4角度與面積較大的包含R3, R4, A5, A7, A14; 美國人物比日本人物長度參數較短的參數有 LA2 , LA8, LA9, LB3, LA10, LB5, LB4, LB2, LB1, LA1, LA5, LA11, LA12, LB7角度與面積較小的包含R1, R2, R5, R6, A1, A2, A3, A4, A6, A8, A9, A10, A11, A12, A13, A15, A16, A17;

日本以漫畫和真人來比較時，真人比漫畫人物長度參數較長的包含LA2,LA9, LA10, LB5, LB4, LB2, LA1, LA5, LA12角度與面積較大的包含R2, R3, R4, R5, A2, A3 ,A4, A8, A9, A10, A11, A12, A15, A17;真人比漫畫人物長度參數較短的參數有LA8, LB3, LA3, LB6, LB1, LA6, LA11, LA4, LB7角度與面積較小的包含R1, R6, A1, A5, A6, A7, A13, A14, A16;

美國以漫畫和真人來比較時，真人比漫畫人物長度參數較長的包含LA2, LA9, LB3, LA10, LB5, LB4, LB2, LA4角度與面積較大的包含R6, A2, A4, A6, A8, A9, A12, A14, A15, A17; 真人比漫畫人物長度參數較短的參數有 LA8, LA3, LB6, LB1, LA1, LA5, LA6, LA11, LA12, LB7,角度與面積較小的包含R1, R2, R3, R4, R5, A1, A3, A5, A7, A10, A11, A13, A16;

Table-3,S1b.R [np=30, repeat 100 times] 1/20

DT ture 美日真人

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Features | train\_acc | sen | spe | test\_acc | sen | spe |
|  | ALL=L+R+A | 96.158  (1.401) | 96.756  (2.198) | 95.515  (2.639) | 74.833  (7.222) | 78.564  (12.301) | 71.578  (12.612) |
|  | L | 95.425  (2.778 | 95.495  (3.634) | 95.353  (3.605) | 71.500  (6.595) | 69.992  (11.023) | 73.140  (11.640) |
|  | R | 93.233  (1.590 | 93.591  (3.091) | 92.862  (2.784) | 60.300  (8.647) | 62.275  (13.320) | 58.566  (13.845) |
|  | A | 95.875  (1.126 | 96.185  (1.966) | 95.533  (2.066) | 76.500  (6.806) | 77.277  (10.212) | 76.036  (11.778) |
|  | L+R | 95.550  (1.495 | 95.847  (2.366) | 95.218  (3.138) | 70.633  (7.227) | 69.610  (12.997) | 71.984  (11.027) |
|  | L+A | 96.000  (1.498 | 96.457  (2.397) | 95.534  (2.583) | 75.633  (7.723) | 75.630  (11.784) | 75.692  (11.201) |
|  | R+A | 96.450  (1.434 | 96.907  (2.013) | 95.961  (2.354) | 75.600  (7.667) | 79.885  (10.918) | 71.521  (12.115) |
|  | single F1 |  |  |  |  |  |  |
|  | 1 | train\_acc | Sen | Spe | test\_acc | sen | spe |
| LA2 | 2 | 89.758  (1.564) | 91.844  (2.571) | 87.606  (2.926) | 76.967  (6.446) | 78.666  (9.791) | 75.707  (10.504) |
| LA8 | 3 | 88.083  (1.306) | 90.447  (3.017) | 85.679  (3.772) | 70.000  (7.324) | 75.359  (12.457) | 65.317  (11.180) |
| LA9 | 4 | 87.992  (1.637) | 89.130  (3.208) | 86.768  (3.628) | 62.500  (8.059) | 60.976  (13.810) | 65.180  (12.351) |
| LB3 | 5 | 85.950  (1.932) | 84.926  (3.503) | 86.896  (3.673) | 56.100  (8.839) | 55.588  (14.417) | 57.428  (14.187) |
| LA3 | 6 | 83.483  (1.647) | 81.385  (4.306) | 85.398  (3.753) | 48.633  (8.262) | 47.274  (15.168) | 51.065  (13.529) |
| LA10 | 7 | 87.075  (1.537) | 86.839  (4.237) | 87.223  (3.686) | 52.667  (8.736) | 51.861  (14.718) | 54.438  (14.153) |
| LB5 | 8 | 82.833  (1.749) | 80.618  (4.034) | 84.978  (3.492) | 49.600  (7.875) | 48.696  (13.011) | 50.809  (14.923) |
| LB4 | 9 | 85.767  (1.787) | 87.446  (3.437) | 84.010  (3.876) | 52.133  (8.308) | 53.215  (13.685) | 51.739  (14.094) |
| LB2 | 10 | 81.008  (1.590) | 81.462  (5.186) | 80.419  (4.470) | 42.833  (7.689) | 40.865  (13.888) | 45.888  (13.016) |
| LB6 | 11 | 84.867  (1.728) | 85.005  (4.116) | 84.722  (4.281) | 49.733  (7.809) | 50.129  (13.637) | 49.441  (13.628) |
| LB1 | 12 | 85.992  (1.875) | 85.752  (4.505) | 86.171  (3.987) | 55.500  (7.990) | 52.640  (12.877) | 58.653  (12.239) |
| LA1 | 13 | 87.608  (2.002) | 88.192  (3.563) | 86.993  (3.884) | 60.467  (8.288) | 59.000  (12.386) | 62.667  (14.197) |
| LA5 | 14 | 87.108  (1.710) | 85.867  (3.268) | 88.264  (3.325) | 54.500  (8.598) | 55.871  (13.549) | 53.385  (13.590) |
| LA6 | 15 | 85.367  (1.462) | 88.464  (3.417) | 82.187  (3.472) | 57.300  (8.693) | 59.155  (14.865) | 56.014  (13.137) |
| LA7 | 16 | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  0.000) |
| LA11 | 17 | 84.417  (1.652) | 86.534  (4.728) | 82.158  (4.720) | 48.200  (8.280) | 48.782  (13.743) | 48.489  (14.550) |
| LA4 | 18 | 85.217  (1.787) | 87.427  (4.067) | 82.846  (4.031) | 55.533  (8.099) | 58.780  (13.915 | 53.742  (14.614) |
| LA12 | 19 | 85.533  (1.560) | 85.889  (3.773) | 85.099  (3.937) | 54.367  (8.036) | 53.899  (12.941) | 55.493  (13.214) |
| LB7 | 20 | 83.900  (1.716) | 85.416  (3.598) | 82.343  (3.790) | 53.933  (8.638) | 57.573  (15.747) | 50.992  (12.214) |
| R1 | 21 | 88.283  (1.740) | 86.710  (3.597) | 89.816  (3.690) | 65.400  (7.182) | 64.681  (11.432) | 66.726  (13.885) |
| R2 | 22 | 85.242  (1.689) | 84.621  (3.789) | 85.820  (3.851) | 52.033  (8.487) | 50.805  (14.709) | 53.772  (14.110) |
| R3 | 23 | 84.492  (1.953) | 82.430  (3.794) | 86.511  (4.005) | 50.633  (8.405) | 51.627  (14.451) | 50.527  (13.777) |
| R4 | 24 | 85.908  (1.816) | 84.477  (4.242) | 87.295  (3.187) | 53.433  (7.572) | 54.478  (14.589) | 53.164  (13.394) |
| R5 | 25 | 80.883  (1.784) | 80.302  (4.368) | 81.356  (4.463) | 44.633  (7.755) | 42.820  (13.152) | 46.885  (13.778) |
| R6 | 26 | 83.558  (1.842) | 82.193  (4.109) | 84.798  (4.179) | 52.833  (9.644) | 55.451  (13.936) | 51.211  (13.694) |
| A1 | 27 | 89.958  (1.476) | 89.623  (2.923) | 90.269  (2.890) | 73.600  (6.043) | 73.918  (12.134) | 73.677  (11.388) |
| A2 | 28 | 87.117  (1.418) | 87.381  (2.988) | 86.767  (3.274) | 60.200  (8.299) | 58.711  (13.778) | 62.522  (12.836) |
| A3 | 29 | 84.333  (1.580) | 85.102  (3.858) | 83.544  (4.074) | 62.100  (7.794) | 64.909  (12.821) | 59.562  (12.501) |
| A4 | 30 | 85.267  (1.708) | 84.181  (3.303) | 86.347  (3.703) | 53.267  (9.368) | 55.707  (12.778) | 51.580  (13.590) |
| A5 | 31 | 86.858  (1.796) | 88.924  (3.788) | 84.717  (4.348) | 58.567  (7.860) | 60.509  (12.839) | 57.318  (13.664) |
| A6 | 32 | 86.475  (1.772) | 86.468  (3.833) | 86.447  (3.343) | 56.200  (8.261) | 55.779  (12.593) | 56.804  (12.770) |
| A7 | 33 | 83.792  (1.825) | 84.656  (4.040) | 82.815  (3.876) | 46.533  (7.231) | 43.902  (13.734) | 50.130  (13.615) |
| A8 | 34 | 86.892  (1.666) | 87.050  (3.643) | 86.664  (3.085) | 52.400  (8.027) | 52.830  (13.227) | 53.029  (14.146) |
| A9 | 35 | 85.483  (1.851) | 83.070  (4.137) | 87.784  (3.633) | 52.400  (9.200) | 51.921  (12.977) | 53.259  (14.140) |
| A10 | 36 | 86.508  (1.583) | 85.772  (3.529) | 87.210  (3.423) | 54.267  (7.858) | 55.593  (13.131) | 53.421  (13.776) |
| A11 | 37 | 8(5.092  1.891) | 83.075  (4.462) | 86.972  (3.533) | 49.333  (8.026) | 49.962  (12.647) | 49.012  (13.123) |
| A12 | 38 | 85.100  (1.797) | 84.869  (3.881) | 85.197  (3.603) | 49.000  (7.864) | 51.659  (14.535) | 47.926  (12.960) |
| A13 | 39 | 90.283  (1.471) | 89.323  (2.954) | 91.172  (2.962) | 60.967  (8.114) | 57.463  (15.264) | 65.323  (14.339) |
| A14 | 40 | 86.633  (1.539) | 87.302  (4.219) | 85.886  (3.613) | 61.467  (8.059) | 63.358  (13.922) | 60.441  (13.386) |
| A15 | 41 | 84.583  (1.630) | 86.096  (4.300) | 83.018  (4.287) | 50.033  (8.213) | 50.840  (15.065) | 50.294  (10.992) |
| A16 | 42 | 84.742  (1.883) | 84.487  (3.968) | 84.965  (3.615) | 57.067  (7.702) | 55.638  (13.070) | 58.635  (12.960) |
| A17 | 43 | 86.358  (1.834) | 86.078  (3.960) | 86.569  (3.397) | 52.167  (7.733) | 54.831  (13.291) | 50.024  (14.147) |

Nose.index=c(1,2,5,21,27,30)

Eye.index=c(1,17,26)

Eyebrow.index=c(1,19,20,40,41,42,43)

Ear.index=c(1,11,29)

Mouth.index=c(1,6,18)

Face.index=c(1,3,4,7,10,12,13,14,15,22,24,25,28,35,36,37,38,39)

FaceL.index=c(1,15,13,4,10,12,7,14,3)

FaceR.index=c(1,24,22,25)

FaceA.index=c(1,28,36,35,37,38,39)

Chin.index=c(1,8,9,23,31,32,33,34)

DT Ture 美日真人 五官

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Features | train\_acc | sen | spe | test\_acc | sen | spe |
| *nose\_all*  5,21,27,30,2 | 93.583  (1.542) | 95.193  (2.482) | 91.931  (2.845) | 77.200  (6.926) | 79.090  (10.864) | 75.513  (11.038) |
| *eye\_all*  *17,26* | 88.750  (1.822) | 87.470  (4.097) | 89.929  (3.889) | 50.167  (8.663) | 50.536  (13.371) | 50.122  (13.464) |
| *eyebrow\_all*  *43,19,42,41,40,20* | 94.125  (1.491) | 93.665  (2.526) | 94.592  (2.704) | 66.667  (8.409) | 66.187  (12.561) | 67.597  (13.075) |
| *ear\_all*  *11,29* | 90.550  (1.754) | 90.287  (3.645) | 90.768  (3.491) | 61.400  (8.979) | 61.777  (13.676) | 62.047  (14.081) |
| *mouth\_all*  *18,6* | 89.308  (1.721) | 89.069  (3.280) | 89.516  (3.288) | 52.867  (7.756) | 51.951  (14.239) | 54.433  (13.663) |
| *faceL\_all*  15,13,4,10,12,7,  14,3 | 93.783  (1.647) | 94.448  (2.523) | 93.122  (2.769) | 70.067  (9.211) | 67.437  (13.040) | 72.472  (13.048) |
| *faceR\_all*  24,22,25 | 91.567  (1.762) | 91.863  (3.547) | 91.239  (3.314) | 52.067  (7.651) | 53.959  (15.053) | 50.538  (12.724) |
| *faceA\_all*  28,36,35,37,38,39 | 94.117  (1.610) | 93.630  (3.125) | 94.525  (2.946) | 62.333  (7.691) | 61.266  (12.510) | 63.978  (13.731) |
| *chin\_all*  *8,9,34,31,23,33,32* | 92.817  (1.483) | 93.138  (2.978) | 92.470  (2.627) | 59.167  (8.427) | 56.726  (14.430) | 62.614  (11.319) |

DT cartoon 美日卡通

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Features | train\_acc | sen | spe | test\_acc | sen | spe |
|  | ALL=L+R+A | 96.867  (1.293) | 96.558  (2.394) | 97.188  (1.992) | 73.167  (8.032) | 74.245  (11.910) | 72.347  (12.450) |
|  | L | 96.033  (1.451 | 97.005  (2.003) | 95.043  (2.495) | 72.600  (7.194) | 74.790  (10.559) | 70.798  (11.426) |
|  | R | 94.583  (1.414 | 95.274  (2.536) | 93.844  (3.074) | 71.500  (6.537) | 72.249  (11.929) | 71.100  (10.412) |
|  | A | 96.083  (1.353 | 95.716  (2.357) | 96.430  (2.024) | 66.033  (7.086) | 65.995  (11.060) | 66.534  (12.506) |
|  | L+R | 96.433  (1.254 | 96.347  (2.226) | 96.504  (2.422) | 74.433  (6.497) | 74.729  (10.194) | 74.497  (9.999) |
|  | L+A | 96.492  (1.294 | 96.328  (2.066) | 96.663  (2.042) | 73.433  (7.835) | 74.118  (11.583) | 72.873  (12.437) |
|  | R+A | 96.033  (1.197 | 95.817  (2.265) | 96.240  (2.066) | 75.267  (7.494) | 77.360  (10.926) | 73.565  (11.345) |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | single F1 |  |  |  |  |  |  |
|  | 1 |  |  |  |  |  |  |
| LA2 | 2 | 86.217  (1.668) | 86.473  (3.978) | 85.874  (3.842) | 54.300  (8.506) | 55.149  (14.460) | 53.794  (13.675) |
| LA8 | 3 | 87.458  (1.586) | 85.229  (3.958) | 89.615  (3.484) | 54.767  (8.492) | 54.068  (12.839) | 56.421  (14.262) |
| LA9 | 4 | 86.792  (1.660) | 82.898  (3.998) | 90.598  (3.520) | 57.700  (8.188) | 58.495  (12.685) | 58.119  (14.747) |
| LB3 | 5 | 90.058  (1.625) | 90.624  (3.097) | 89.448  (3.152) | 69.833  (7.616) | 67.625  (12.057) | 73.070  (12.405) |
| LA3 | 6 | 84.408  (1.701) | 84.239  (3.380) | 84.445  (4.015) | 54.567  (7.937) | 54.238  (12.971) | 55.423  (13.942) |
| LA10 | 7 | 86.508  (1.682) | 87.693  (3.944) | 85.221  (3.847) | 56.300  (8.136) | 55.675  (12.780) | 57.833  (13.823) |
| LB5 | 8 | 84.625  (1.817) | 86.369  (3.539) | 82.866  (4.342) | 56.367  (7.264) | 57.397  (12.732) | 55.296  (11.694) |
| LB4 | 9 | 85.183  (1.673) | 83.406  (3.623) | 86.886  (3.702) | 56.800  (7.042) | 55.652  (13.168) | 58.471  (11.029) |
| LB2 | 10 | 86.950  (1.750) | 87.599  (3.555) | 86.252  (3.925) | 60.667  (7.857) | 62.006  (11.756) | 59.685  (13.819) |
| LB6 | 11 | 84.667  (1.667) | 87.402  (3.627) | 81.856  (3.747) | 47.067  (8.141) | 47.735  (12.983) | 46.812  (12.782) |
| LB1 | 12 | 86.325  (1.633) | 89.221  (3.328) | 83.369  (4.066) | 57.233  (8.316) | 59.085  (16.210) | 55.681  (12.176) |
| LA1 | 13 | 87.433  (1.727) | 84.252  (4.021) | 90.515  (3.790) | 58.267  (8.294) | 57.630  (14.135) | 59.509  (14.240) |
| LA5 | 14 | 86.642  (1.726) | 88.926  (3.239) | 84.277  (3.701) | 58.100  (8.237) | 54.887  (13.618) | 61.690  (13.746) |
| LA6 | 15 | 87.292  (1.734) | 89.848  (3.202) | 84.652  (3.609) | 66.133  (7.366) | 70.675  (12.102) | 62.590  (11.036) |
| LA7 | 16 LA7 | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) |
| LA11 | 17 | 84.833  (1.761) | 86.959  (3.958) | 82.644  (4.236) | 51.133  (8.154) | 53.701  (14.272) | 48.528  (13.465) |
| LA4 | 18 | 86.650  (1.645) | 88.395  (3.606) | 84.832  (4.075) | 59.867  (8.474) | 59.194  (13.449) | 61.462  (13.099) |
| LA12 | 19 | 86.233  (1.669) | 86.515  (3.410) | 85.859  (3.906) | 60.167  (9.081) | 60.116  (14.229) | 60.898  (13.286) |
| LB7 | 20 | 85.650  (1.852) | 83.244  (3.740) | 88.010  (3.968) | 50.367  (7.594) | 49.022  (12.903) | 52.442  (12.884) |
| R1 | 21 | 89.908  (1.474) | 88.867  (3.169) | 90.877  (3.036) | 69.367  (7.909) | 70.252  (13.778) | 69.025  (12.753) |
| R2 | 22 | 86.075  (1.847) | 85.039  (3.768) | 87.095  (3.325) | 57.833  (7.833) | 56.071  (14.186) | 59.364  (13.687) |
| R3 | 23 | 85.833  (1.877) | 85.326  (3.441) | 86.273  (4.046) | 50.033  (8.375) | 52.882  (13.930) | 48.346  (12.748) |
| R4 | 24 | 85.508  (1.679) | 86.764  (3.563) | 84.179  (3.505) | 60.767  (9.012) | 61.476  (14.667) | 60.531  (14.875) |
| R5 | 25 | 87.308  (1.571) | 89.226  (3.230) | 85.295  (3.215) | 63.900  (7.971) | 64.945  (12.815) | 63.382  (11.314) |
| R6 | 26 | 85.800  (1.850) | 84.672  (4.086) | 86.806  (4.109) | 49.400  (7.718) | 49.179  (12.243) | 50.588  (13.122) |
| A1 | 27 | 90.058  (1.504) | 90.087  (3.135) | 89.961  (3.437) | 67.333  (6.931) | 67.189  (11.313) | 67.841  (11.357) |
| A2 | 28 | 84.850  (1.613) | 88.910  (3.669) | 80.732  (3.975) | 57.233  (7.957) | 61.475  (13.878) | 53.528  (13.118) |
| A3 | 29 | 86.500  (1.602) | 88.178  (3.105) | 84.780  (3.373) | 62.300  (7.102) | 62.865  (12.372) | 62.317  (13.864) |
| A4 | 30 | 85.100  (1.770) | 88.528  (3.446) | 81.629  (4.352) | 51.333  (8.977) | 52.366  (12.607) | 50.602  (14.377) |
| A5 | 31 | 85.175  (1.362) | 85.873  (3.711) | 84.368  (3.505) | 57.433  (7.549) | 60.099  (13.603) | 55.845  (12.230) |
| A6 | 32 | 84.192  (1.802) | 82.684  (4.145) | 85.645  (3.711) | 46.800  (8.671) | 46.920  (12.175) | 47.407  (13.571) |
| A7 | 33 | 85.483  (1.816) | 87.152  (4.040) | 83.672  (4.295) | 50.567  (9.488) | 53.710  (15.959) | 48.581  (14.738) |
| A8 | 34 | 85.767  (1.775) | 85.656  (4.251) | 85.775  (3.800) | 50.733  (8.363) | 53.620  (13.647) | 48.605  (13.894) |
| A9 | 35 | 86.050  (1.775) | 85.344  (4.192) | 86.737  (3.676) | 57.833  (8.156) | 56.785  (12.915) | 59.292  (13.854) |
| A10 | 36 | 85.350  (1.809) | 85.732  (4.062) | 84.867  (3.551) | 57.933  (7.709) | 57.967  (10.980) | 58.728  (12.428) |
| A11 | 37 | 85.308  (1.803) | 86.363  (3.744) | 84.145  (4.092) | 52.633  (7.904) | 54.899  (14.060) | 51.083  (11.555) |
| A12 | 38 | 88.083  (1.626) | 89.486  (2.987) | 86.610  (3.911) | 57.133  (7.828) | 60.028  (12.923) | 55.247  (13.031) |
| A13 | 39 | 83.367  (1.982) | 80.868  (4.541) | 85.688  (4.159) | 49.767  (7.405) | 48.923  (12.209) | 51.245  (13.468) |
| A14 | 40 | 85.667  (1.753) | 86.756  (3.866) | 84.512  (4.067) | 50.000  (8.528) | 52.549  (14.889) | 48.676  (13.288) |
| A15 | 41 | 86.158  (1.691) | 90.159  (3.652) | 82.052  (4.222) | 55.033  (7.864) | 56.492  (13.047) | 53.589  (12.311) |
| A16 | 42 | 85.117  (1.503) | 84.870  (3.361) | 85.326  (3.196) | 53.933  (8.211) | 55.736  (13.064) | 53.206  (15.813) |
| A17 | 43 | 86.767  (1.713) | 86.420  (3.389) | 87.058  (3.558) | 56.700  (6.808) | 55.937  (13.178) | 57.740  (12.501) |

Nose.index=c(1,2,5,21,27,30)

Eye.index=c(1,17,26)

Eyebrow.index=c(1,19,20,40,41,42,43)

Ear.index=c(1,11,29)

Mouth.index=c(1,6,18)

Face.index=c(1,3,4,7,10,12,13,14,15,22,24,25,28,35,36,37,38,39)

FaceL.index=c(1,15,13,4,10,12,7,14,3)

FaceR.index=c(1,24,22,25)

FaceA.index=c(1,28,36,35,37,38,39)

Chin.index=c(1,8,9,23,31,32,33,34)

DT cartoon 美日卡通 五官

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Features | train\_acc | sen | spe | test\_acc | sen | spe |
| *nose\_all*  5,21,27,30,2 | 95.108  (1.420) | 94.625  (2.573) | 95.570  (2.191) | 73.733  (7.673) | 72.088  (11.928) | 75.710  (13.126) |
| *eye\_all*  *17,26* | 89.075  (1.780) | 88.846  (3.063) | 89.295  (3.366) | 58.333  (7.850) | 57.989  (13.226) | 59.184  (12.775) |
| *eyebrow\_all*  *43,19,42,41,40,20* | 93.525  (1.593) | 93.771  (2.900) | 93.278  (2.355) | 60.900  (7.696) | 62.128  (13.097) | 60.099  (12.435) |
| *ear\_all*  *11,29* | 90.392  (1.878) | 90.425  (3.279) | 90.287  (3.865) | 55.867  (8.000) | 57.629  (13.237) | 54.410  (12.790) |
| *mouth\_all*  *18,6* | 90.342  (1.820) | 89.705  (3.206) | 90.943  (3.188) | 63.667  (7.921) | 64.508  (13.002) | 63.862  (12.324) |
| *faceL\_all*  15,13,4,10,12,7,  14,3 | 93.033  (1.626) | 92.447  (2.834) | 93.587  (2.575) | 60.100  (8.481) | 59.855  (13.735) | 60.411  (14.378) |
| *faceR\_all*  24,22,25 | 92.633  (1.520) | 94.150  (2.783) | 91.067  (2.972) | 64.700  (7.972) | 65.771  (11.656) | 64.355  (13.527) |
| *faceA\_all*  28,36,35,37,38,39 | 93.625  (1.677) | 93.402  (2.796) | 93.814  (2.785) | 62.533  (8.543) | 62.041  (14.097) | 63.766  (13.929) |
| *chin\_all*  *8,9,34,31,23,33,32* | 94.508  (1.616) | 95.014  (2.638) | 93.973  (2.629) | 68.200  (8.507) | 68.944  (12.022) | 67.515  (12.818) |

DT JCJT 日本漫畫 日本真人

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Features | train\_acc | sen | spe | test\_acc | sen | spe |
|  | ALL=L+R+A | 98.742  (0.763) | 98.711  (0.888) | 98.763  (1.345) | 90.767  (4.390) | 89.326  (7.165) | 92.133  (6.347) |
|  | L | 98.292  (0.771) | 98.218  (1.096) | 98.362  (1.536) | 90.967  (4.084) | 89.885  (7.773) | 92.184  (6.766) |
|  | R | 97.600  (0.733) | 97.503  (1.042) | 97.689  (1.019) | 95.133  (4.327) | 94.362  (7.113) | 96.118  (5.196) |
|  | A | 98.492 | 98.683 | 98.292 | 92.833 | 91.689 | 93.831 |
| (0.818) | (1.073) | (1.138) | (4.113) | (6.535) | (6.516) |
|  | L+R | 98.767 | 98.483 | 99.051 | 90.700 | 88.158 | 93.318 |
|  | (0.754) | (1.092) | (1.355) | (4.838) | (8.349) | (6.654) |
|  | L+A | 98.717 | 98.847 | 98.576 | 89.767 | 87.536 | 92.073 |
|  | (0.866) | (0.910) | (1.530) | (4.323) | (7.638) | (7.065) |
|  | R+A | 98.742 | 99.134 | 98.336 | 92.933 | 92.653 | 93.783 |
| (0.763) | (0.900) | (1.614) | (4.245) | (7.751) | (5.854) |
|  |  |  |  |  |  |  |  |
|  | single F1 |  |  |  |  |  |  |
|  | 1 |  |  |  |  |  |  |
| LA2 | 2 | 86.717  (1.74) | 84.057  (3.761) | 89.284  (3.725) | 62.167  (7.601) | 61.320  (14.577) | 63.077  (14.342) |
| LA8 | 3 | 89.342  (1.559) | 89.302  (3.184) | 89.313  (3.145) | 69.167  (7.601) | 67.417  (12.174) | 71.130  (13.427) |
| LA9 | 4 | 86.108  (1.508) | 84.797  (3.222) | 87.390  (3.775) | 62.333  (7.705) | 63.364  (12.738) | 61.479  (12.272) |
| LB3 | 5 | 94.608  (1.015) | 92.057  (2.259) | 97.095  (1.550) | 88.867  (5.259) | 85.341  (8.124) | 92.622  (7.440) |
| LA3 | 6 | 85.333  (1.411) | 82.672  (3.585) | 87.936  (2.964) | 64.500  (7.482) | 65.161  (12.185) | 64.814  (14.029) |
| LA10 | 7 | 87.875  (1.505) | 85.973  (3.732) | 89.702  (3.138) | 67.867  (7.378) | 66.474  (10.3) | 69.655  (13.827) |
| LB5 | 8 | 89.567  (1.394) | 88.889  (3.005) | 90.221  (2.884) | 72.000  (6.548) | 72.104  (11.905) | 72.191  (13.014) |
| LB4 | 9 | 88.200  (1.744) | 88.207  (3.742) | 88.132  (3.789) | 62.767  (7.186) | 60.834  (11.175) | 66.011  (14.134) |
| LB2 | 10 | 87.500  (1.721) | 87.391  (3.517) | 87.515  (3.236) | 64.167  (7.891) | 67.473  (12.982) | 61.929  (14.740) |
| LB6 | 11 | 91.692  (1.139) | 93.345  (2.469) | 90.040  (2.861) | 78.800  (6.776) | 79.211  (10.591) | 78.588  (10.726) |
| LB1 | 12 | 87.217  (1.490) | 83.670  (3.766) | 90.700  (3.388) | 71.467  (7.159) | 70.431  (11.753) | 72.59  (12.225) |
| LA1 | 13 | 86.175  (1.461) | 83.684  (3.326) | 88.611  (3.060) | 63.200  (8.053) | 64.163  (12.264) | 63.847  (13.460) |
| LA5 | 14 | 88.892  (1.371) | 87.480  (3.908) | 90.245  (2.884) | 69.000  (7.691) | 67.313  (10.865) | 71.220  (12.466) |
| LA6 | 15 | 89.692  (1.306) | 90.752  (3.007) | 88.593  (3.198) | 69.733  (7.441) | 70.410  (13.917) | 69.550  (10.072) |
| LA7 | 16 LA7 | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) |
| LA11 | 17 | 95.517  (0.869) | 95.083  (1.911) | 95.951  (1.724) | 93.167  (4.140) | 93.446  (6.390) | 92.958  (7.441) |
| LA4 | 18 | 89.833  (1.340) | 92.145  (2.810) | 87.494  (3.148) | 67.700  (7.766) | 69.562  (12.614) | 65.961  (11.188) |
| LA12 | 19 | 88.617  (1.750) | 87.049  (3.733) | 90.104  (2.977) | 61.600  (7.498) | 63.045  (11.802) | 61.070  (12.117) |
| LB7 | 20 | 87.808  (1.561) | 88.426  (3.216) | 87.184  (3.675) | 68.633  (7.264) | 69.272  (11.74) | 68.224  (11.945) |
| R1 | 21 | 92.908  (1.295) | 91.718  (3.048) | 94.026  (2.708) | 83.533  (5.971) | 82.938  (9.498) | 84.725  (10.075) |
| R2 | 22 | 86.742  (1.540) | 85.765  (4.243) | 87.622  (3.571) | 57.167  (7.947) | 55.749  (13.000) | 59.889  (13.749) |
| R3 | 23 | 87.767  (1.736) | 86.257  (3.639) | 89.220  (3.568) | 59.333  (7.355) | 59.406  (12.167) | 59.330  (14.268) |
| R4 | 24 | 87.792  (1.714) | 86.804  (4.292) | 88.689  (4.208) | 61.333  (8.012) | 63.734  (13.57) | 59.793  (12.668) |
| R5 | 25 | 85.400  (1.500) | 83.740  (4.228) | 86.997  (3.736) | 57.967  (7.74) | 60.396  (10.966) | 55.852  (14.454) |
| R6 | 26 | 94.975  (0.951) | 92.801  (2.010) | 97.114  (1.503) | 92.733  (4.141) | 90.455  (7.333) | 94.891  (5.096) |
| A1 | 27 | 92.892  (1.250) | 91.117  (2.859) | 94.597  (2.732) | 82.200  (6.127) | 80.649  (10.768) | 84.088  (10.735) |
| A2 | 28 | 87.417  (1.429) | 91.667  (2.969) | 83.095  (3.686) | 62.800  (8.189) | 61.311  (12.455) | 64.655  (12.47) |
| A3 | 29 | 87.217  (1.599) | 88.821  (3.586) | 85.537  (3.428) | 55.600  (8.474) | 55.932  (13.241) | 56.212  (14.665) |
| A4 | 30 | 86.225  (1.295) | 83.384  (3.356) | 89.006  (2.761) | 62.000  (7.385) | 60.625  (11.526) | 63.443  (12.363) |
| A5 | 31 | 86.383  (1.590) | 86.131  (3.857) | 86.563  (3.210) | 58.833  (7.512) | 59.135  (12.925) | 59.329  (11.491) |
| A6 | 32 | 86.492  (1.642) | 88.647  (3.152) | 84.281  (3.494) | 55.467  (6.471) | 57.074  (13.605) | 53.733  (11.385) |
| A7 | 33 | 87.142  (1.766) | 83.717  (4.534) | 90.453  (3.732) | 57.767  (6.684) | 52.201  (12.122) | 64.248  (13.093) |
| A8 | 34 | 88.533  (1.461) | 85.327  (3.731) | 91.662  (3.330) | 61.833  (7.689) | 60.734  (14.843) | 63.988  (13.499) |
| A9 | 35 | 88.808  (1.481) | 90.182  (2.548) | 87.379  (2.740) | 66.433  (8.465) | 68.074  (11.85) | 64.941  (13.461) |
| A10 | 36 | 89.958  (1.634) | 88.033  (3.318) | 91.845  (2.369) | 69.033  (7.570) | 67.864  (11.345) | 70.472  (12.132) |
| A11 | 37 | 85.183  (1.715) | 84.873  (3.953) | 85.421  (3.881) | 56.133  (7.007) | 58.054  (13.377) | 54.767  (12.798) |
| A12 | 38 | 88.450  (1.679) | 87.587  (3.125) | 89.235  (3.385) | 63.133  (8.107) | 63.466  (14.962) | 64.103  (12.726) |
| A13 | 39 | 86.617  (1.666) | 85.204  (3.589) | 87.982  (3.643) | 56.133  (8.694) | 54.134  (13.010) | 58.91  (14.154) |
| A14 | 40 | 88.017  (1.579) | 85.71  (3.217) | 90.308  (2.632) | 64.933  (7.676) | 61.474  (12.369) | 69.114  (13.496) |
| A15 | 41 | 87.700  (1.351) | 87.257  (3.033) | 88.093  (2.840) | 73.800  (6.882) | 73.789  (12.330) | 73.994  (11.416) |
| A16 | 42 | 85.067  (1.317) | 85.709  (4.502) | 84.274  (4.455) | 54.500  (7.833) | 55.133  (13.576) | 54.544  (13.025) |
| A17 | 43 | 91.192  (1.106) | 92.590  (2.964) | 89.726  (3.177) | 75.033  (6.294) | 75.113  (10.300) | 75.335  (10.079) |

Nose.index=c(1,2,5,21,27,30)

Eye.index=c(1,17,26)

Eyebrow.index=c(1,19,20,40,41,42,43)

Ear.index=c(1,11,29)

Mouth.index=c(1,6,18)

Face.index=c(1,3,4,7,10,12,13,14,15,22,24,25,28,35,36,37,38,39)

FaceL.index=c(1,15,13,4,10,12,7,14,3)

FaceR.index=c(1,24,22,25)

FaceA.index=c(1,28,36,35,37,38,39)

Chin.index=c(1,8,9,23,31,32,33,34)

DT JCJT 日本漫畫 日本真人 五官

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Features | train\_acc | sen | spe | test\_acc | sen | spe |
| *nose\_all*  5,21,27,30,2 | 97.750  (0.890) | 97.946  (1.194) | 97.538  (1.592) | 90.567  (5.060) | 90.764  (8.522) | 90.709  (6.885) |
| *eye\_all*  *17,26* | 95.892  (0.88) | 95.298  (1.893) | 96.473  (1.649) | 91.133  (4.623) | 90.165  (7.602) | 92.018  (7.095) |
| *eyebrow\_all*  *43,19,42,41,40,20* | 96.675  (1.181) | 96.442  (2.014) | 96.900  (2.116) | 83.033  (6.233) | 78.084  (10.834) | 88.412  (8.038) |
| *ear\_all*  *11,29* | 92.550s  (1.370) | 92.541  (3.006) | 92.550  (2.971) | 80.233  (7.142) | 81.254  (11.325) | 79.585  (10.753) |
| *mouth\_all*  *18,6* | 93.375  (1.193) | 93.337  (2.612) | 93.398  (2.735) | 75.400  (6.629) | 75.020  (10.192) | 76.031  (11.752) |
| *faceL\_all*  15,13,4,10,12,7,  14,3 | 95.700  (1.064) | 96.748  (1.694) | 94.621  (2.073) | 87.267  (5.732) | 86.842  (9.856) | 87.915  (8.359) |
| *faceR\_all*  24,22,25 | 93.358  (1.542) | 93.710  (3.03) | 92.944  (2.739) | 72.667  (8.068) | 74.350  (12.817) | 71.203  (12.358) |
| *faceA\_all*  28,36,35,37,38,39 | 95.725  (1.246) | 96.332  (2.263) | 95.078  (2.166) | 76.000  (6.767) | 75.498  (10.872) | 76.813  (11.237) |
| *chin\_all*  *8,9,34,31,23,33,32* | 96.050  (1.096) | 96.691  (1.952) | 95.362  (2.364) | 78.000  (5.841) | 77.661  (11.397) | 78.748  (10.602) |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

DT UCUT 美國漫畫美國真人

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Features | train\_acc | sen | spe | test\_acc | sen | spe |
|  | ALL=L+R+A | 98.950  (0.726) | 98.890  (1.198) | 99.004  (1.124) | 89.633  (6.175) | 89.347  (8.272) | 90.143  (9.169) |
|  | L | 98.683  (0.769) | 98.750  (1.100) | 98.609  (1.334) | 90.433  (4.893) | 90.476  (7.047) | 90.799  (7.981) |
|  | R | 97.150  (1.197) | 96.304  (2.774) | 97.985  (1.838) | 89.300  (5.175) | 89.825  (8.348) | 88.637  (9.259) |
|  | A | 97.692  (0.784) | 98.516  (1.236) | 96.843  (1.605) | 87.400  (5.309) | 86.080  (8.208) | 88.801  (8.495) |
|  | L+R | 99.050  (0.649) | 99.005  (1.034) | 99.103  (1.012) | 90.600  (6.130) | 89.690  (8.874) | 91.755  (7.974) |
|  | L+A | 97.517  (0.925) | 98.661  (1.187) | 96.382  (1.556) | 91.633  (5.157) | 91.482  (8.605) | 91.838  (6.590) |
|  | R+A | 98.167  (0.865) | 98.605  (1.297) | 97.734  (1.62) | 88.100  (5.353) | 87.715  (9.551) | 88.944  (8.282) |
|  | single F1 |  |  |  |  |  |  |
|  | 1 |  |  |  |  |  |  |
| LA2 | 2 | 90.667  (1.214) | 85.141  (3.29) | 96.135  (2.066) | 81.400  (6.43) | 76.860  (10.282) | 86.258  (10.695) |
| LA8 | 3 | 93.083  (1.121) | 92.025  (2.946) | 94.083  (2.417) | 80.400  (6.772) | 79.824  (11.515) | 80.948  (9.538) |
| LA9 | 4 | 92.175  (1.19) | 90.896  (2.934) | 93.411  (2.792) | 80.533  (6.062) | 75.956  (11.84) | 85.713  (9.752) |
| LB3 | 5 | 89.050  (1.494) | 86.354  (3.097) | 91.705  (2.639) | 72.567  (8.080) | 70.699  (12.187) | 75.160  (14.231) |
| LA3 | 6 | 86.150  (1.445) | 87.279  (3.592) | 84.976  (3.456) | 61.467  (7.175) | 61.752  (12.958) | 61.847  (11.844) |
| LA10 | 7 | 89.367  (1.377) | 86.421  (3.413) | 92.191  (2.886) | 69.200  (7.772) | 69.051  (12.555) | 69.707  (12.62) |
| LB5 | 8 | 87.558  (1.693) | 86.057  (3.497) | 88.973  (3.382) | 59.300  (7.960) | 61.404  (13.941) | 58.729  (14.329) |
| LB4 | 9 | 88.633  (1.434) | 87.400  (3.055) | 89.831  (3.163) | 71.667  (7.514) | 68.380  (12.82) | 74.844  (11.537) |
| LB2 | 10 | 87.492  (1.551) | 85.743  (4.049) | 89.198  (3.394) | 62.567  (7.883) | 63.804  (12.13) | 61.697  (13.734) |
| LB6 | 11 | 86.358  (1.618) | 85.197  (3.813) | 87.510  (3.869) | 61.467  (7.585) | 61.945  (12.661) | 61.261  (14.16) |
| LB1 | 12 | 90.408  (1.289) | 90.179  (3.263) | 90.547  (3.298) | 65.000  (7.763) | 61.640  (12.729) | 68.985  (13.938) |
| LA1 | 13 | 92.583  (1.228) | 90.933  (3.118) | 94.172  (2.552) | 80.367  (6.46) | 76.545  (10.455) | 84.740  (8.759) |
| LA5 | 14 | 89.308  (1.382) | 87.242  (3.534) | 91.255  (2.928) | 68.467  (7.805) | 67.901  (12.744) | 69.866  (13.731) |
| LA6 | 15 | 91.850  (1.453) | 91.722  (2.637) | 91.949  (2.621) | 82.867  (5.918) | 82.854  (8.878) | 83.407  (9.789) |
| LA7 | 16 LA7 | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) | 0.000  (0.000) |
| LA11 | 17 | 93.742  (1.082) | 90.687  (2.974) | 96.774  (2.238) | 86.000  (6.356) | 83.001  (9.163) | 89.366  (10.625) |
| LA4 | 18 | 91.242  (1.300) | 90.946  (2.383) | 91.511  (2.481) | 81.667  (6.641) | 81.300  (10.059) | 82.500  (11.649) |
| LA12 | 19 | 87.008  (1.671) | 87.145  (3.808) | 86.814  (3.297) | 59.233  (8.460) | 60.451  (13.415) | 58.604  (13.028) |
| LB7 | 20 | 90.400  (1.234) | 88.509  (3.150) | 92.271  (2.952) | 74.000  (6.548) | 73.303  (12.286) | 75.189  (12.008) |
| R1 | 21 | 90.892  (1.55) | 90.159  (2.809) | 91.576  (2.799) | 68.333  (7.661) | 67.690  (12.29) | 69.559  (11.866) |
| R2 | 22 | 91.200  (1.331) | 88.094  (3.174) | 94.249  (2.667) | 78.300  (6.365) | 75.667  (8.628) | 81.230  (11.522) |
| R3 | 23 | 86.317  (1.499) | 87.632  (3.615) | 84.945  (3.785) | 59.367  (7.304) | 61.422  (11.267) | 58.289  (13.927) |
| R4 | 24 | 88.400  (1.435) | 86.160  (3.216) | 90.573  (2.942) | 70.567  (7.477) | 66.969  (12.072) | 74.521  (11.971) |
| R5 | 25 | 87.408  (1.624) | 84.299  (3.256) | 90.457  (3.045) | 60.733  (8.718) | 58.553  (13.751) | 62.604  (11.667) |
| R6 | 26 | 93.625  (1.398) | 90.733  (3.290) | 96.477  (2.512) | 78.867  (6.586) | 74.931  (11.011) | 83.277  (11.621) |
| A1 | 27 | 92.317  (1.311) | 91.868  (2.84) | 92.759  (2.484) | 80.367  (7.026) | 80.875  (11.982) | 80.089  (10.789) |
| A2 | 28 | 86.500  (1.47) | 86.268  (3.716) | 86.637  (3.592) | 63.167  (8.306) | 61.707  (13.967) | 65.325  (14.214) |
| A3 | 29 | 87.508  (1.343) | 86.171  (3.025) | 88.811  (2.937) | 62.433  (7.489) | 59.708  (11.758) | 65.803  (13.174) |
| A4 | 30 | 88.250  (1.727) | 85.005  (3.881) | 91.472  (3.29) | 66.133  (9.122) | 63.763  (12.488) | 68.844  (14.368) |
| A5 | 31 | 85.942  (1.538) | 83.206  (3.965) | 88.587  (3.359) | 62.533  (8.249) | 59.588  (12.568) | 66.128  (12.983) |
| A6 | 32 | 88.225  (1.579) | 85.753  (3.397) | 90.657  (2.681) | 54.867  (9.540) | 53.514  (12.67) | 56.160  (13.527) |
| A7 | 33 | 88.683  (1.629) | 86.522  (3.491) | 90.741  (3.169) | 67.333  (7.278) | 67.332  (13.964) | 68.111  (13.43) |
| A8 | 34 | 87.450  (1.744) | 87.115  (3.682) | 87.690  (3.284) | 57.833  (7.437) | 57.787  (13.181) | 58.573  (13.682) |
| A9 | 35 | 88.225  (1.524) | 85.208  (3.547) | 91.152  (2.874) | 64.000  (8.342) | 64.364  (12.900) | 64.459  (13.790) |
| A10 | 36 | 88.583  (1.217) | 85.271  (3.804) | 91.799  (2.923) | 67.167  (8.638) | 66.899  (13.121) | 68.063  (13.609) |
| A11 | 37 | 86.683  (1.441) | 87.439  (3.199) | 85.862  (3.263) | 64.867  (7.791) | 66.926  (12.701) | 62.939  (13.125) |
| A12 | 38 | 93.283  (1.318) | 91.628  (2.862) | 94.876  (2.235) | 79.100  (6.945) | 76.499  (11.251) | 81.729  (11.525) |
| A13 | 39 | 84.333  (1.862) | 83.049  (4.311) | 85.512  (3.792) | 54.100  (9.112) | 51.734  (12.191) | 57.449  (15.335) |
| A14 | 40 | 92.042  (1.138) | 89.866  (2.993) | 94.162  (2.349) | 81.000  (5.715) | 79.068  (10.159) | 83.365  (10.478) |
| A15 | 41 | 89.700  (1.574) | 90.530  (2.989) | 88.805  (3.024) | 70.367  (8.300) | 69.426  (13.386) | 71.958  (12.422) |
| A16 | 42 | 91.675  (1.267) | 91.152  (3.075) | 92.114  (3.064) | 78.100  (7.298) | 77.571  (11.737) | 79.016  (11.211) |
| A17 | 43 | 88.925  (1.466) | 87.346  (3.533) | 90.457  (2.971) | 64.367  (7.227) | 64.274  (11.106) | 65.409  (14.28) |

Nose.index=c(1,2,5,21,27,30)

Eye.index=c(1,17,26)

Eyebrow.index=c(1,19,20,40,41,42,43)

Ear.index=c(1,11,29)

Mouth.index=c(1,6,18)

Face.index=c(1,3,4,7,10,12,13,14,15,22,24,25,28,35,36,37,38,39)

FaceL.index=c(1,15,13,4,10,12,7,14,3)

FaceR.index=c(1,24,22,25)

FaceA.index=c(1,28,36,35,37,38,39)

Chin.index=c(1,8,9,23,31,32,33,34)

DT UCUT 美國漫畫美國真人 五官

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Features | train\_acc | sen | spe | test\_acc | sen | spe |
| *nose\_all* | 97.225  (0.955) | 97.515  (1.839) | 96.895  (2.11) | 89.333  (6.667) | 89.890  (9.882) | 89.187  (10.491) |
| *eye\_all* | 95.567  (1.225) | 93.423  (3.206) | 97.721  (2.705) | 87.100  (6.297) | 87.400  (9.029) | 87.579  (9.764) |
| *eyebrow\_all* | 97.467  (1.004) | 97.143  (1.758) | 97.788  (1.312) | 89.633  (5.358) | 86.133  (8.361) | 93.260  (6.837) |
| *ear\_all* | 92.333  (1.628) | 91.496  (3.601) | 93.126  (2.934) | 72.800  (7.289) | 69.839  (11.983) | 76.123  (11.744) |
| *mouth\_all* | 93.900  (1.207) | 95.999  (1.963) | 91.824  (2.082) | 83.300  (6.330) | 84.972  (9.936) | 82.002  (9.278) |
| *faceL\_all* | 98.108  (1.078) | 97.325  (1.905) | 98.886  (1.161) | 90.567  (5.647) | 90.181  (8.120) | 90.946  (8.209) |
| *faceR\_all* | 94.742  (1.301) | 96.094  (2.151) | 93.390  (2.909) | 82.567  (5.643) | 82.197  (9.145) | 83.366  (9.535) |
| *faceA\_all* | 96.425  (1.357) | 97.227  (1.933) | 95.619  (2.133) | 84.233  (7.353) | 83.994  (11.584) | 84.864  (10.184) |
| *chin\_all* | 95.583  (1.399) | 96.070  (2.321) | 95.078  (2.848) | 75.033  (6.939) | 76.421  (11.794) | 73.741  (12.654) |