**Summary**

**Non-cleaned (with beginnings)**

Validation BACC (last voting strategy; without smoothing)

|  |  |  |  |
| --- | --- | --- | --- |
|  | 16 | 32 | 64 |
| 64 U | 0.7928 +/- 0.0251  0.8015 +/- 0.0272 | 0.7956 +/- 0.0234  0.7991 +/- 0.0253 | 0.7933 +/- 0.0305  0.8013 +/- 0.0254 |
| 128 U | 0.7912 +/- 0.0237  0.7981 +/- 0.0273 | 0.7968 +/- 0.0267  0.8009 +/- 0.0262 | 0.7830 +/- 0.0263  0.8050 +/- 0.0272 |
| 32 U + 32 U | 0.8020 +/- 0.0207  0.8087 +/- 0.0217 | 0.8061 +/- 0.0248  **0.8114 +/- 0.0205** | 0.8071 +/- 0.0228  **0.8118 +/- 0.0203** |
| 64 U + 64 U | 0.8001 +/- 0.0213  0.8050 +/- 0.0233 | 0.8023 +/- 0.0270  0.8026 +/- 0.0242 | 0.7852 +/- 0.0284  0.8058 +/- 0.0283 |
| 128 U + 128 U | 0.7949 +/- 0.0267  0.7986 +/- 0.0273 | 0.7930 +/- 0.0273  0.8045 +/- 0.0243 | 0.7863 +/- 0.0330  0.8084 +/- 0.0310 |

(1st row: 6 features; 2nd row: 12 features)

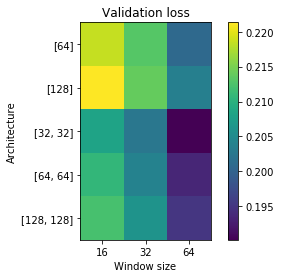
Settings:

* batch\_size = 128
* early-stop on val\_loss, patience 10, max 100 epochs
* Dropout 0.1 (each GRU layer)

=> 12 features better than 6 [always]

* always lower val loss mean
* Always higher val BACC mean

=> voting strategy **last** gives higher BACC than **majority**, in all cases (any feature type, any window size, any architecture)





**Testing non-smoothed VS smoothed - [both NON-cleaned data]**

Non-smoothed have smaller stds!

Not very clear which voting strategy, which window size, # features, architecture …

… minimal differences between smoothed and nonsmoothed

**Cleaned VS non-cleaned**

[cleaned: validation, loss]

|  |  |  |  |
| --- | --- | --- | --- |
|  | 16 | 32 | 64 |
| 64 U | 0.2237 +/- 0.0200  0.2252 +/- 0.0275 | 0.2140 +/- 0.0269  0.2141 +/- 0.0235 | **0.2035 +/- 0.0221**  0.2044 +/- 0.0253 |
| 128 U | 0.2271 +/- 0.0200  0.2287 +/- 0.0287 | 0.2160 +/- 0.0294  0.2175 +/- 0.0244 | 0.2076 +/- 0.0224  0.2064 +/- 0.0261 |
| 32 U + 32 U |  |  |  |
| 64 U + 64 U |  |  |  |
| 128 U + 128 U |  |  |  |

[cleaned: validation, last voting strategy]

|  |  |  |  |
| --- | --- | --- | --- |
|  | 16 | 32 | 64 |
| 64 U | 0.7980 +/- 0.0222  0.8027 +/- 0.0248 | 0.8019 +/- 0.0258  **0.8110 +/- 0.0245** | 0.8016 +/- 0.0246  0.8057 +/- 0.0209 |
| 128 U | 0.7939 +/- 0.0248  0.7966 +/- 0.0259 | 0.8009 +/- 0.0309  0.8066 +/- 0.0259 | 0.7973 +/- 0.0287  0.8031 +/- 0.0294 |
| 32 U + 32 U |  |  |  |
| 64 U + 64 U |  |  |  |
| 128 U + 128 U |  |  |  |

[cleaned: validation, majority voting strategy]

|  |  |  |  |
| --- | --- | --- | --- |
|  | 16 | 32 | 64 |
| 64 U | 0.7708 +/- 0.0225  0.7788 +/- 0.0248 | 0.7870 +/- 0.0266  0.7971 +/- 0.0237 | 0.7978 +/- 0.0244  **0.8026 +/- 0.0218** |
| 128 U | 0.7656 +/- 0.0244  0.7721 +/- 0.0261 | 0.7859 +/- 0.0302  0.7928 +/- 0.0259 | 0.7923 +/- 0.0289  0.8000 +/- 0.0285 |
| 32 U + 32 U |  |  |  |
| 64 U + 64 U |  |  |  |
| 128 U + 128 U |  |  |  |

[cleaned: **test**, last voting strategy]

|  |  |  |  |
| --- | --- | --- | --- |
|  | 16 | 32 | 64 |
| 64 U | 0.7900 +/- 0.1487  **0.8034 +/- 0.1328** | 0.7998 +/- 0.1459  0.7896 +/- 0.1452 | 0.7823 +/- 0.1591  0.7783 +/- 0.1600 |
| 128 U | 0.7990 +/- 0.1366  0.7957 +/- 0.1426 | 0.7921 +/- 0.1478  0.7865 +/- 0.1531 | 0.7933 +/- 0.1479  0.7918 +/- 0.1524 |
| 32 U + 32 U |  |  |  |
| 64 U + 64 U |  |  |  |
| 128 U + 128 U |  |  |  |

[cleaned: **test**, majority voting strategy]

|  |  |  |  |
| --- | --- | --- | --- |
|  | 16 | 32 | 64 |
| 64 U | 0.7793 +/- 0.1522  0.7855 +/- 0.1465 | **0.7940 +/- 0.1488**  0.7870 +/- 0.1507 | 0.7857 +/- 0.1602  0.7806 +/- 0.1593 |
| 128 U | 0.7815 +/- 0.1474  0.7794 +/- 0.1532 | 0.7876 +/- 0.1530  0.7821 +/- 0.1561 | 0.7925 +/- 0.1491  0.7937 +/- 0.1534 |
| 32 U + 32 U |  |  |  |
| 64 U + 64 U |  |  |  |
| 128 U + 128 U |  |  |  |

[cleaned: **test**, by subjects]

=> exclude subjects …