-ile - pipeline

```
1 "C:\Users\Albert Kjøller\AppData\Local\Programs\Python\Python38\python.exe" "C:/Users/Albert Kjøller/Documents/
                                                                                                                                                                                                                                                           (0.8350438976134537, 0.0, 1.0). Time: 0.022583 seconds
(0.8679361938914307, 0.8777225696997645, 0.8714645342810603). Time: 1.607718 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (0.8354148633609497, 0.0, 1.0). Time: 0.017012 seconds (0.9985161370100161, 0.9985188070508587, 0.9982238010657194). Time: 6.204798 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (0.8324471373809819, 0.0, 1.0). Time: 0.017999 seconds (0.8958822802027946, 0.9031126514792952, 0.8909685086155674). Time: 1.902325 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (0.9907258563126005, 0.9908261753758836, 0.9888839484215207). Time: 129.205880 seconds
                                                                                                                                                                                                                                                                                                                                                (0.8624953629281563, 0.8764840797769939, 0.8360728565082186). Time: 128.304267 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (0.9677259799678496, 0.9688490383556716, 0.96136751793961). Time: 125.892186 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (0.8253987881785582, 0.8450757494814407, 0.7902554961378491). Time: 127.197442 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8/8 [01:54<00:00, 14.30s/trial, best loss: -0.8503745205558323]
                                                                                                                                                                                                                                                                                                                    8/8 [01:54<00:00, 14.25s/trial, best loss: -0.8842993759027002]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8/8 [01:52<00:00, 14.12s/trial, best loss: -0.9705854112802254]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8/8 [01:56<00:00, 14.53s/trial, best loss: -0.9844570892195444]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (0.8343019641184617, 0.0, 1.0). Time: 0.017000 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (1.0, 1.0, 1.0). Time: 3.486681 seconds
                              GitHub/EEG_epilepsia/evaluation/pipeline.py"
                                                                                                                                                                                                                                                                                                                                                                                                                                                           - fold 1/5
                                                                                                                                                                                                    7 Training on the class: eyem
                                                                                                                                                                                                                                                                                                                                                                                                        14 Training on the class: chew
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35 Training on the class: musc
36
                                                                                                                 4 Running 5-fold CV
                                                                                                                                                                                                                                                                                      10 LogisticReg:
11 100%|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LogisticReg:
                                                                                                                                                                                                                                                            Baseline:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Baseline:
                                                                                                                                                                                                                                                                                                                                                 KNN:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100\%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30 | 32 | 32 | 32 | 34 | 34
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-ile - pipeline

```
(0.8314578953876592, 0.0, 1.0). Time: 0.022948 seconds (0.8652157784097935, 0.8748736996667982, 0.8698691255205235). Time: 1.693053 seconds
                                                 LogisticReg:
  Baseline:
```

(0.7628292321009027, 0.7920731880385483, 0.7149018441403926). Time: 127.166951 seconds 8/8 [01:54<00:00, 14.27s/trial, best loss: -0.7980655751604545] 100%|KNN: 38

40 42 41

- fold 2/5 Running 5-fold CV 43

46 Training on the class: eyem 45 47

(0.8312105848893285, 0.0, 1.0). Time: 0.018134 seconds Baseline:

(0.866575986150612, 0.8757296476488663, 0.8734007735792919). Time: 1.641969 seconds 8/8 [01:53<00:00, 14.14s/trial, best loss: -0.8843623616867455] LogisticReg: 100%

(0.8927908989736615, 0.901989105120749, 0.8713180601011604). Time: 127.607439 seconds KNN.

Training on the class: chew

Baseline:

(0.8277482379126994, 0.0, 1.0). Time: 0.019048 seconds (0.9975268950166934, 0.997533858629449, 0.9970122497759187). Time: 5.844415 seconds 8/8 [01:57<00:00, 14.68s/trial, best loss: -0.9694838321396915] LogisticReg: 100%

(0.9655001854828738, 0.9667032741324261, 0.9583208843740664). Time: 130.725835 seconds KNN:

Training on the class: shiv . 09 61

(0.8360331396067763, 0.0, 1.0). Time: 0.018524 seconds (0.9995053790033387, 0.9995056782792965, 0.9994083715426711). Time: 2.781179 seconds 8/8 [01:52<00:00, 14.12s/trial, best loss: -0.9909485350570182] LogisticReg: 100%

(0.9908495115617658, 0.9909485350570182, 0.9890548735394172). Time: 127.275634 seconds KNN: 99

67 Training on the class: elpp

89

(0.8331890688759738, 0.0, 1.0). Time: 0.017121 seconds (0.9061456658835167, 0.912087109792263, 0.9029385574354408). Time: 1.873827 seconds 8/8 [01:59<00:00, 14.98s/trial, best loss: -0.7611231088850222] LogisticReg: 100%

(0.736861629776184, 0.7702042678467811, 0.6841792816859602). Time: 134.480874 seconds KNN:

74 Training on the class: musc

```
(0.834054655620131, 0.0, 1.0). Time: 0.018999 seconds (0.8995919376777545, 0.9069338914045977, 0.8907338769458858). Time: 1.930303 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (0.9975268950166934, 0.9975341006476022, 0.9970282317979198). Time: 5.797262 seconds
                                                                                                                                                                                                                                                                                                                                                                                       (0.8735006801038704, 0.8827789498180213, 0.8793356848912405). Time: 1.820908 seconds
                              (0.8673179176456041, 0.8771173681063869, 0.870532403974492). Time: 1.678899 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (0.999629034252504, 0.9996292005653415, 0.9995554238292828). Time: 3.288801 seconds
                                                                                            (0.8321998268826512, 0.8509350569918994, 0.7990508675663651). Time: 133.764031 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (0.8502534932607889, 0.8669045540701109, 0.8224573780129336). Time: 131.492960 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (0.9818226783726969, 0.9821893040193238, 0.9781575037147102). Time: 126.623554 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (0.9767528131569185, 0.9773510772947044, 0.972139893301719). Time: 130.605091 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                   | 8/8 [01:57<00:00, 14.65s/trial, best loss: -0.8730495435894308]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8/8 [01:55<00:00, 14.49s/trial, best loss: -0.7698714084760454]
                                                          8/8 [02:01<00:00, 15.13s/trial, best loss: -0.8509350569918994]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8/8 [01:53<00:00, 14.22s/trial, best loss: -0.9680129427846251]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8/8 [01:55<00:00, 14.48s/trial, best loss: -0.9779392751716326]
(0.8338073451218004, 0.0, 1.0). Time: 0.028041 seconds
                                                                                                                                                                                                                                                                                                                                                      (0.8413503153208853, 0.0, 1.0). Time: 0.019367 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (0.8321998268826512, 0.0, 1.0). Time: 0.019113 seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (0.8344256213676271, 0.0, 1.0). Time: 0.019001 seconds
                                                                                                                                                                                         Running 5-fold CV - fold 3/5
                                                                                                                                                                                                                                                                                  85 Training on the class: eyem
86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Training on the class: chew
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Training on the class: shiv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94 Baseline: (
95 LogisticReg:
                              LogisticReg:
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76 Baseline:
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88 Logist
89 100%|
90 KNN:
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                                                            100%
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                                                                                          79 KNN:
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83
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93
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(0.7298132805737604, 0.7643269502341805, 0.676056338028169). Time: 130.554442 seconds 113 Training on the class: musc 111 KNN:

(0.8314578953876592, 0.0, 1.0). Time: 0.017162 seconds Baseline: 115

(0.8670706071472734, 0.8762275111680061, 0.8735871505056514). Time: 1.836212 seconds 8/8 [01:53<00:00, 14.21s/trial, best loss: -0.792600110143389] LogisticReg: 100%116 117

(0.8321998268826512, 0.8506560145294153, 0.7983343248066627). Time: 126.752066 seconds KNN:

119

118

1 12

124 Training on the class: eyem

125

(0.8308396191418326, 0.0, 1.0). Time: 0.018163 seconds Baseline: 126

(0.8753555088413503, 0.8831700945376305, 0.8837624646524781). Time: 1.809729 seconds 8/8 [01:55<00:00, 14.50s/trial, best loss: -0.8789607003152179] LogisticReg: 100%128 127

(0.8585383949548658, 0.8727052546159824, 0.8309272213126954). Time: 130.336045 seconds 129

131 Training on the class: chew

130

132

(0.8376406578459256, 0.0, 1.0). Time: 0.018227 seconds Baseline: 133

(0.9975268950166934, 0.9975344134584495, 0.9970475346914673). Time: 6.551734 seconds 8/8 [01:55<00:00, 14.47s/trial, best loss: -0.9433676315705488] LogisticReg: 135 100% 134

(0.953876592061333, 0.9560919822780033, 0.9449365219958665). Time: 130.094498 seconds KNN: 136

138 Training on the class: shiv

137

(0.8321998268826512, 0.0, 1.0). Time: 0.018072 seconds Baseline: 140

(0.9997526895016694, 0.9997527621820865, 0.999702823179792). Time: 3.065736 seconds LogisticReg: 141

(0.9899839248176086, 0.9900987393771807, 0.9879643387815751). Time: 125.900217 seconds 8/8 [01:53<00:00, 14.17s/trial, best loss: -0.9900987393771807] KNN: 100% 142 143

145 Training on the class: elpp

(0.8277482379126994, 0.0, 1.0). Time: 0.017949 seconds 147 Baseline:

```
(0.8999629034252504, 0.9065035261942845, 0.8945324170899313). Time: 2.207072 seconds
   148 LogisticReg:
```

(0.8772103375788303, 0.8884244091998791, 0.8516582013743651). Time: 128.275819 seconds 8/8 [01:55<00:00, 14.46s/trial, best loss: -0.8884244091998791] 149 100% 150 KNN:

152 Training on the class: musc

Baseline: 154

(0.8371460368492643, 0.0, 1.0). Time: 0.023000 seconds (0.868059849140596, 0.8780347466317941, 0.8714918759231906). Time: 1.882639 seconds 8/8 [01:51<00:00, 13.94s/trial, best loss: -0.8558248455475783] LogisticReg: 156 100% 155

(0.82985037714851, 0.8494194095374276, 0.7967503692762186). Time: 124.419614 seconds 157

Running 5-fold CV - fold 5/5 160 159

161

162

163 Training on the class: eyem

(0.8282216176106851, 0.0, 1.0). Time: 0.021604 seconds Baseline: 165

(0.8752164234479347, 0.8836608112000741, 0.8777064357174854). Time: 1.591621 seconds LogisticReg: 166

|| 8/8 [01:53<00:00, 14.21s/trial, best loss: -0.9010464797521975⁻ 100%167

(0.891911946574326, 0.9010464797521975, 0.8697924443780798). Time: 126.210649 seconds KNN: 168 169

170 Training on the class: chew

171

(0.833663121444472, 0.0, 1.0). Time: 0.020167 seconds Baseline: 172

(0.9970319069997526, 0.9970423839379762, 0.9964396973742768). Time: 5.707831 seconds LogisticReg: 173

| 8/8 [01:54<00:00, 14.27s/trial, best loss: -0.983976575309006] 100%

(0.981696759831808, 0.9820724334332124, 0.978044800474707). Time: 127.035881 seconds KNN: 174 175

177 Training on the class: shiv

(0.8297056641108088, 0.0, 1.0). Time: 0.020672 seconds 179 Baseline:

(0.9993816472916152, 0.999382092344216, 0.9992547324489491). Time: 3.453073 seconds 8/8 [02:01<00:00, 15.21s/trial, best loss: -0.9715878046601563] 180 LogisticReg: 181 100%

(0.9699480583724956, 0.9708892409825312, 0.9637799970189298). Time: 137.319502 seconds

184 Training on the class: elpp

(0.8392282958199357, 0.0, 1.0). Time: 0.019297 seconds 186 Baseline:

(0.9082364580756864, 0.9144257914920725, 0.90377247273799). Time: 2.253098 seconds 8/8 [01:51<00:00, 13.95s/trial, best loss: -0.8982142577431267] 187 LogisticReg: 188 100%

(0.8788028691565669, 0.8906750870884298, 0.8555850279988211). Time: 123.920547 seconds 189 KNN:

191 Training on the class: musc

192

190

(0.8327974276527331, 0.0, 1.0). Time: 0.021042 seconds Baseline: 193

(0.8582735592381895, 0.868277777030622, 0.8675378675378675). Time: 1.576249 seconds 194 LogisticReg:

| 8/8 [01:52<00:00, 14.08s/trial, best loss: -0.8607949726978048] 195 100%

(0.833653121444472, 0.8520628619936522, 0.8002673002673003). Time: 124.870384 seconds KNN: 196

accuracy 0.833333 musc 1.000000 1.000000 elpp 1.000000 0.999584 shiv 1.000000 chew 1.000000 eyem baseline 198 197

0.927230 0.890548 0.870604 0.781861 0.896589 0.771547 0.980365 0.964165 0.997150 0.877134 0.846114

knn

200

199 lr

0.833333 baseline

0.927230 205 knn ہا 204

206 207 208 Based on KNN

musc 0.735357 elpp 0.662978 shiv 0.965824 0.946604 chew eyem 0.817752 210 lower 209

0.828365 0.781861 0.880116 0.771547 0.980365 0.994905 0.964165 0.981727 0.846114 0.874476 upper mean 211 212

 $214 \ \text{Process}$ finished with exit code 0 215