

```
1 C:\ProgramData\Anaconda3\envs\MCL\python.exe C:\Users\Luca\PycharmProjects\mcl-activity-
  monitoring\offlineModels\NN\BaseModel.py
2 2022-05-26 10:39:35.636263: W tensorflow/stream_executor/platform/default/dso_loader.cc:
  64] Could not load dynamic library 'cudart64_110.dll'; dlerror: cudart64_110.dll not
  found
3 2022-05-26 10:39:35.636351: I tensorflow/stream_executor/cuda/cudart_stub.cc:29] Ignore
  above cudart dlerror if you do not have a GPU set up on your machine.
4 fix train-test-split is used
5
6 288 trials detected for ('activation', 'optimizer', 'dropout_rate', 'epochs', 'batch_size
  ', 'nodecount', 'nodecount2')
7 2022-05-26 10:39:39.150671: W tensorflow/stream_executor/platform/default/dso_loader.cc:
  64] Could not load dynamic library 'nvcuda.dll'; dlerror: nvcuda.dll not found
8 2022-05-26 10:39:39.150744: W tensorflow/stream_executor/cuda/cuda_driver.cc:269] failed
  call to cuInit: UNKNOWN ERROR (303)
9 2022-05-26 10:39:39.152465: I tensorflow/stream_executor/cuda/cuda_diagnostics.cc:169]
  retrieving CUDA diagnostic information for host: PC-Luca
10 2022-05-26 10:39:39.152553: I tensorflow/stream_executor/cuda/cuda_diagnostics.cc:176]
  hostname: PC-Luca
11 2022-05-26 10:39:39.152736: I tensorflow/core/platform/cpu_feature_guard.cc:193] This
  TensorFlow binary is optimized with oneAPI Deep Neural Network Library (oneDNN) to use
  the following CPU instructions in performance-critical operations: AVX AVX2
12 To enable them in other operations, rebuild TensorFlow with the appropriate compiler
  flags.
13
14 ***** (1/288) *****
15 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
  , 'batch_size': 25, 'nodecount': 64, 'nodecount2': 64})
16 Restoring model weights from the end of the best epoch: 24.
17 Epoch 31: early stopping
18 SCORE: 0.6502 at epoch 24
19
20 ***** (2/288) *****
21 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
  , 'batch_size': 25, 'nodecount': 64, 'nodecount2': 256})
22 Restoring model weights from the end of the best epoch: 26.
23 Epoch 33: early stopping
24 SCORE: 0.65487 at epoch 18
25
26 ***** (3/288) *****
27 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
  , 'batch_size': 25, 'nodecount': 64, 'nodecount2': 128})
28 Restoring model weights from the end of the best epoch: 24.
29 Epoch 31: early stopping
30 SCORE: 0.6512 at epoch 18
31
32 ***** (4/288) *****
33 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
  , 'batch_size': 25, 'nodecount': 64, 'nodecount2': 512})
34 Restoring model weights from the end of the best epoch: 24.
35 Epoch 31: early stopping
36 SCORE: 0.65554 at epoch 21
37
38 ***** (5/288) *****
39 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
  , 'batch_size': 25, 'nodecount': 256, 'nodecount2': 64})
40 Restoring model weights from the end of the best epoch: 7.
41 Epoch 14: early stopping
42 SCORE: 0.60848 at epoch 11
```

```
43
44 ***** (6/288) *****
45 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 256})
46 Restoring model weights from the end of the best epoch: 22.
47 Epoch 29: early stopping
48 SCORE: 0.67256 at epoch 21
49
50 ***** (7/288) *****
51 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 128})
52 Restoring model weights from the end of the best epoch: 17.
53 Epoch 24: early stopping
54 SCORE: 0.65087 at epoch 16
55
56 ***** (8/288) *****
57 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 512})
58 Restoring model weights from the end of the best epoch: 10.
59 Epoch 17: early stopping
60 SCORE: 0.65053 at epoch 16
61
62 ***** (9/288) *****
63 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 64})
64 Restoring model weights from the end of the best epoch: 20.
65 Epoch 27: early stopping
66 SCORE: 0.66055 at epoch 18
67
68 ***** (10/288) *****
69 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 256})
70 Restoring model weights from the end of the best epoch: 24.
71 Epoch 31: early stopping
72 SCORE: 0.66856 at epoch 18
73
74 ***** (11/288) *****
75 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 128})
76 Restoring model weights from the end of the best epoch: 17.
77 Epoch 24: early stopping
78 SCORE: 0.66389 at epoch 18
79
80 ***** (12/288) *****
81 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 512})
82 Restoring model weights from the end of the best epoch: 24.
83 Epoch 31: early stopping
84 SCORE: 0.65754 at epoch 16
85
86 ***** (13/288) *****
87 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 64})
88 Restoring model weights from the end of the best epoch: 22.
89 Epoch 29: early stopping
90 SCORE: 0.66589 at epoch 21
91
92 ***** (14/288) *****
93 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
```

```
93 , 'batch_size': 25, 'nodecount': 512, 'nodecount2': 256})
94 Restoring model weights from the end of the best epoch: 10.
95 Epoch 17: early stopping
96 SCORE: 0.65554 at epoch 16
97
98 ***** (15/288) *****
99 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 128})
100 Restoring model weights from the end of the best epoch: 17.
101 Epoch 24: early stopping
102 SCORE: 0.65821 at epoch 21
103
104 ***** (16/288) *****
105 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 512})
106 Restoring model weights from the end of the best epoch: 10.
107 Epoch 17: early stopping
108 SCORE: 0.6532 at epoch 16
109
110 ***** (17/288) *****
111 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 64})
112 Restoring model weights from the end of the best epoch: 23.
113 Epoch 30: early stopping
114 SCORE: 0.64252 at epoch 15
115
116 ***** (18/288) *****
117 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 256})
118 Restoring model weights from the end of the best epoch: 20.
119 Epoch 27: early stopping
120 SCORE: 0.64619 at epoch 20
121
122 ***** (19/288) *****
123 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 128})
124 Restoring model weights from the end of the best epoch: 23.
125 Epoch 30: early stopping
126 SCORE: 0.65154 at epoch 20
127
128 ***** (20/288) *****
129 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 512})
130 Restoring model weights from the end of the best epoch: 24.
131 Epoch 31: early stopping
132 SCORE: 0.64352 at epoch 15
133
134 ***** (21/288) *****
135 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 64})
136 Restoring model weights from the end of the best epoch: 24.
137 Epoch 31: early stopping
138 SCORE: 0.6482 at epoch 15
139
140 ***** (22/288) *****
141 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 256})
142 Restoring model weights from the end of the best epoch: 24.
143 Epoch 31: early stopping
```

```
144 SCORE: 0.65354 at epoch 27
145
146 ***** (23/288) *****
147 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 128})
148 Restoring model weights from the end of the best epoch: 24.
149 Epoch 31: early stopping
150 SCORE: 0.65053 at epoch 18
151
152 ***** (24/288) *****
153 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 512})
154 Restoring model weights from the end of the best epoch: 24.
155 Epoch 31: early stopping
156 SCORE: 0.6502 at epoch 18
157
158 ***** (25/288) *****
159 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 64})
160 Restoring model weights from the end of the best epoch: 23.
161 Epoch 30: early stopping
162 SCORE: 0.65554 at epoch 15
163
164 ***** (26/288) *****
165 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 256})
166 Restoring model weights from the end of the best epoch: 24.
167 Epoch 31: early stopping
168 SCORE: 0.65788 at epoch 24
169
170 ***** (27/288) *****
171 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 128})
172 Restoring model weights from the end of the best epoch: 24.
173 Epoch 31: early stopping
174 SCORE: 0.66222 at epoch 15
175
176 ***** (28/288) *****
177 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 512})
178 Restoring model weights from the end of the best epoch: 24.
179 Epoch 31: early stopping
180 SCORE: 0.65521 at epoch 24
181
182 ***** (29/288) *****
183 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 64})
184 Restoring model weights from the end of the best epoch: 29.
185 Epoch 36: early stopping
186 SCORE: 0.65955 at epoch 34
187
188 ***** (30/288) *****
189 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 256})
190 Restoring model weights from the end of the best epoch: 16.
191 Epoch 23: early stopping
192 SCORE: 0.64286 at epoch 16
193
194 ***** (31/288) *****
```

```
195 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 128})
196 Restoring model weights from the end of the best epoch: 24.
197 Epoch 31: early stopping
198 SCORE: 0.65554 at epoch 24
199
200 ***** (32/288) *****
201 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 512})
202 Restoring model weights from the end of the best epoch: 7.
203 Epoch 14: early stopping
204 SCORE: 0.63852 at epoch 11
205
206 ***** (33/288) *****
207 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 64})
208 Restoring model weights from the end of the best epoch: 23.
209 Epoch 30: early stopping
210 SCORE: 0.64219 at epoch 20
211
212 ***** (34/288) *****
213 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 256})
214 Restoring model weights from the end of the best epoch: 41.
215 Epoch 48: early stopping
216 SCORE: 0.66622 at epoch 47
217
218 ***** (35/288) *****
219 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 128})
220 Restoring model weights from the end of the best epoch: 41.
221 Epoch 48: early stopping
222 SCORE: 0.67089 at epoch 47
223
224 ***** (36/288) *****
225 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 512})
226 Restoring model weights from the end of the best epoch: 32.
227 Epoch 39: early stopping
228 SCORE: 0.66222 at epoch 39
229
230 ***** (37/288) *****
231 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 64})
232 Restoring model weights from the end of the best epoch: 24.
233 Epoch 31: early stopping
234 SCORE: 0.66255 at epoch 24
235
236 ***** (38/288) *****
237 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 256})
238 Restoring model weights from the end of the best epoch: 24.
239 Epoch 31: early stopping
240 SCORE: 0.66155 at epoch 18
241
242 ***** (39/288) *****
243 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 128})
244 Restoring model weights from the end of the best epoch: 24.
```

```
245 Epoch 31: early stopping
246 SCORE: 0.65754 at epoch 18
247
248 ***** (40/288) *****
249 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 512})
250 Restoring model weights from the end of the best epoch: 17.
251 Epoch 24: early stopping
252 SCORE: 0.65254 at epoch 23
253
254 ***** (41/288) *****
255 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 64})
256 Restoring model weights from the end of the best epoch: 40.
257 Epoch 47: early stopping
258 SCORE: 0.66923 at epoch 47
259
260 ***** (42/288) *****
261 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 256})
262 Restoring model weights from the end of the best epoch: 31.
263 Epoch 38: early stopping
264 SCORE: 0.66789 at epoch 20
265
266 ***** (43/288) *****
267 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 128})
268 Restoring model weights from the end of the best epoch: 40.
269 Epoch 47: early stopping
270 SCORE: 0.66689 at epoch 47
271
272 ***** (44/288) *****
273 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 512})
274 Restoring model weights from the end of the best epoch: 24.
275 Epoch 31: early stopping
276 SCORE: 0.66288 at epoch 24
277
278 ***** (45/288) *****
279 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 64})
280 Restoring model weights from the end of the best epoch: 24.
281 Epoch 31: early stopping
282 SCORE: 0.65387 at epoch 18
283
284 ***** (46/288) *****
285 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 256})
286 Restoring model weights from the end of the best epoch: 17.
287 Epoch 24: early stopping
288 SCORE: 0.66555 at epoch 21
289
290 ***** (47/288) *****
291 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 128})
292 Restoring model weights from the end of the best epoch: 17.
293 Epoch 24: early stopping
294 SCORE: 0.64786 at epoch 17
295
```

```
296 ***** (48/288) *****
297 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 512})
298 Restoring model weights from the end of the best epoch: 10.
299 Epoch 17: early stopping
300 SCORE: 0.65387 at epoch 16
301
302 ***** (49/288) *****
303 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 64})
304 Restoring model weights from the end of the best epoch: 64.
305 Epoch 71: early stopping
306 SCORE: 0.65587 at epoch 67
307
308 ***** (50/288) *****
309 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 256})
310 Restoring model weights from the end of the best epoch: 41.
311 Epoch 48: early stopping
312 SCORE: 0.66322 at epoch 48
313
314 ***** (51/288) *****
315 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 128})
316 Restoring model weights from the end of the best epoch: 41.
317 Epoch 48: early stopping
318 SCORE: 0.66155 at epoch 40
319
320 ***** (52/288) *****
321 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 512})
322 Restoring model weights from the end of the best epoch: 41.
323 Epoch 48: early stopping
324 SCORE: 0.65721 at epoch 41
325
326 ***** (53/288) *****
327 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 64})
328 Restoring model weights from the end of the best epoch: 39.
329 Epoch 46: early stopping
330 SCORE: 0.66589 at epoch 34
331
332 ***** (54/288) *****
333 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 256})
334 Restoring model weights from the end of the best epoch: 24.
335 Epoch 31: early stopping
336 SCORE: 0.65254 at epoch 15
337
338 ***** (55/288) *****
339 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 128})
340 Restoring model weights from the end of the best epoch: 24.
341 Epoch 31: early stopping
342 SCORE: 0.65554 at epoch 15
343
344 ***** (56/288) *****
345 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 512})
```

```
346 Restoring model weights from the end of the best epoch: 24.
347 Epoch 31: early stopping
348 SCORE: 0.65521 at epoch 24
349
350 ***** (57/288) *****
351 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 64})
352 Restoring model weights from the end of the best epoch: 41.
353 Epoch 48: early stopping
354 SCORE: 0.65788 at epoch 41
355
356 ***** (58/288) *****
357 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 256})
358 Restoring model weights from the end of the best epoch: 36.
359 Epoch 43: early stopping
360 SCORE: 0.67356 at epoch 38
361
362 ***** (59/288) *****
363 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 128})
364 Restoring model weights from the end of the best epoch: 39.
365 Epoch 46: early stopping
366 SCORE: 0.66389 at epoch 40
367
368 ***** (60/288) *****
369 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 512})
370 Restoring model weights from the end of the best epoch: 24.
371 Epoch 31: early stopping
372 SCORE: 0.65955 at epoch 20
373
374 ***** (61/288) *****
375 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 64})
376 Restoring model weights from the end of the best epoch: 39.
377 Epoch 46: early stopping
378 SCORE: 0.65988 at epoch 36
379
380 ***** (62/288) *****
381 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 256})
382 Restoring model weights from the end of the best epoch: 24.
383 Epoch 31: early stopping
384 SCORE: 0.66355 at epoch 24
385
386 ***** (63/288) *****
387 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 128})
388 Restoring model weights from the end of the best epoch: 24.
389 Epoch 31: early stopping
390 SCORE: 0.65654 at epoch 28
391
392 ***** (64/288) *****
393 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 512})
394 Restoring model weights from the end of the best epoch: 24.
395 Epoch 31: early stopping
396 SCORE: 0.66288 at epoch 18
```



```
397
398 ***** (65/288) *****
399 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 64})
400 Restoring model weights from the end of the best epoch: 55.
401 Epoch 62: early stopping
402 SCORE: 0.65821 at epoch 56
403
404 ***** (66/288) *****
405 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 256})
406 Restoring model weights from the end of the best epoch: 41.
407 Epoch 48: early stopping
408 SCORE: 0.66255 at epoch 32
409
410 ***** (67/288) *****
411 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 128})
412 Restoring model weights from the end of the best epoch: 55.
413 Epoch 62: early stopping
414 SCORE: 0.67156 at epoch 47
415
416 ***** (68/288) *****
417 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 512})
418 Restoring model weights from the end of the best epoch: 41.
419 Epoch 48: early stopping
420 SCORE: 0.66756 at epoch 32
421
422 ***** (69/288) *****
423 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 64})
424 Restoring model weights from the end of the best epoch: 31.
425 Epoch 38: early stopping
426 SCORE: 0.65187 at epoch 28
427
428 ***** (70/288) *****
429 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 256})
430 Restoring model weights from the end of the best epoch: 24.
431 Epoch 31: early stopping
432 SCORE: 0.66422 at epoch 18
433
434 ***** (71/288) *****
435 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 128})
436 Restoring model weights from the end of the best epoch: 31.
437 Epoch 38: early stopping
438 SCORE: 0.65154 at epoch 21
439
440 ***** (72/288) *****
441 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 512})
442 Restoring model weights from the end of the best epoch: 24.
443 Epoch 31: early stopping
444 SCORE: 0.65721 at epoch 18
445
446 ***** (73/288) *****
447 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
```

```
447 , 'batch_size': 25, 'nodecount': 128, 'nodecount2': 64})
448 Restoring model weights from the end of the best epoch: 41.
449 Epoch 48: early stopping
450 SCORE: 0.67256 at epoch 41
451
452 ***** (74/288) *****
453 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 256})
454 Restoring model weights from the end of the best epoch: 31.
455 Epoch 38: early stopping
456 SCORE: 0.66522 at epoch 34
457
458 ***** (75/288) *****
459 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 128})
460 Restoring model weights from the end of the best epoch: 41.
461 Epoch 48: early stopping
462 SCORE: 0.66589 at epoch 47
463
464 ***** (76/288) *****
465 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 512})
466 Restoring model weights from the end of the best epoch: 24.
467 Epoch 31: early stopping
468 SCORE: 0.66288 at epoch 20
469
470 ***** (77/288) *****
471 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 64})
472 Restoring model weights from the end of the best epoch: 35.
473 Epoch 42: early stopping
474 SCORE: 0.66722 at epoch 40
475
476 ***** (78/288) *****
477 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 256})
478 Restoring model weights from the end of the best epoch: 17.
479 Epoch 24: early stopping
480 SCORE: 0.64653 at epoch 18
481
482 ***** (79/288) *****
483 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 128})
484 Restoring model weights from the end of the best epoch: 24.
485 Epoch 31: early stopping
486 SCORE: 0.66355 at epoch 24
487
488 ***** (80/288) *****
489 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 512})
490 Restoring model weights from the end of the best epoch: 16.
491 Epoch 23: early stopping
492 SCORE: 0.65287 at epoch 18
493
494 ***** (81/288) *****
495 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 64})
496 Restoring model weights from the end of the best epoch: 60.
497 Epoch 67: early stopping
```

```
498 SCORE: 0.65421 at epoch 58
499
500 ***** (82/288) *****
501 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 256})
502 Restoring model weights from the end of the best epoch: 41.
503 Epoch 48: early stopping
504 SCORE: 0.65888 at epoch 40
505
506 ***** (83/288) *****
507 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 128})
508 Restoring model weights from the end of the best epoch: 55.
509 Epoch 62: early stopping
510 SCORE: 0.66055 at epoch 61
511
512 ***** (84/288) *****
513 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 512})
514 Restoring model weights from the end of the best epoch: 41.
515 Epoch 48: early stopping
516 SCORE: 0.66489 at epoch 48
517
518 ***** (85/288) *****
519 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 64})
520 Restoring model weights from the end of the best epoch: 53.
521 Epoch 60: early stopping
522 SCORE: 0.67323 at epoch 58
523
524 ***** (86/288) *****
525 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 256})
526 Restoring model weights from the end of the best epoch: 24.
527 Epoch 31: early stopping
528 SCORE: 0.65387 at epoch 15
529
530 ***** (87/288) *****
531 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 128})
532 Restoring model weights from the end of the best epoch: 24.
533 Epoch 31: early stopping
534 SCORE: 0.6522 at epoch 15
535
536 ***** (88/288) *****
537 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 512})
538 Restoring model weights from the end of the best epoch: 24.
539 Epoch 31: early stopping
540 SCORE: 0.64619 at epoch 24
541
542 ***** (89/288) *****
543 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 64})
544 Restoring model weights from the end of the best epoch: 74.
545 Epoch 81: early stopping
546 SCORE: 0.66489 at epoch 68
547
548 ***** (90/288) *****
```

```
549 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 256})
550 Restoring model weights from the end of the best epoch: 39.
551 Epoch 46: early stopping
552 SCORE: 0.66856 at epoch 34
553
554 ***** (91/288) *****
555 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 128})
556 Restoring model weights from the end of the best epoch: 41.
557 Epoch 48: early stopping
558 SCORE: 0.66555 at epoch 48
559
560 ***** (92/288) *****
561 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 512})
562 Restoring model weights from the end of the best epoch: 24.
563 Epoch 31: early stopping
564 SCORE: 0.66322 at epoch 21
565
566 ***** (93/288) *****
567 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 64})
568 Restoring model weights from the end of the best epoch: 23.
569 Epoch 30: early stopping
570 SCORE: 0.64987 at epoch 21
571
572 ***** (94/288) *****
573 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 256})
574 Restoring model weights from the end of the best epoch: 24.
575 Epoch 31: early stopping
576 SCORE: 0.66589 at epoch 24
577
578 ***** (95/288) *****
579 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 128})
580 Restoring model weights from the end of the best epoch: 24.
581 Epoch 31: early stopping
582 SCORE: 0.66222 at epoch 21
583
584 ***** (96/288) *****
585 Search({'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 512})
586 Restoring model weights from the end of the best epoch: 24.
587 Epoch 31: early stopping
588 SCORE: 0.66856 at epoch 24
589
590 ***** (97/288) *****
591 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 64})
592 Restoring model weights from the end of the best epoch: 17.
593 Epoch 24: early stopping
594 SCORE: 0.65287 at epoch 17
595
596 ***** (98/288) *****
597 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 256})
598 Restoring model weights from the end of the best epoch: 17.
```

```
599 Epoch 24: early stopping
600 SCORE: 0.66055 at epoch 21
601
602 ***** (99/288) *****
603 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 128})
604 Restoring model weights from the end of the best epoch: 17.
605 Epoch 24: early stopping
606 SCORE: 0.65854 at epoch 24
607
608 ***** (100/288) *****
609 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 512})
610 Restoring model weights from the end of the best epoch: 17.
611 Epoch 24: early stopping
612 SCORE: 0.6482 at epoch 13
613
614 ***** (101/288) *****
615 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 64})
616 Restoring model weights from the end of the best epoch: 17.
617 Epoch 24: early stopping
618 SCORE: 0.65053 at epoch 13
619
620 ***** (102/288) *****
621 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 256})
622 Restoring model weights from the end of the best epoch: 8.
623 Epoch 15: early stopping
624 SCORE: 0.62116 at epoch 12
625
626 ***** (103/288) *****
627 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 128})
628 Restoring model weights from the end of the best epoch: 8.
629 Epoch 15: early stopping
630 SCORE: 0.64586 at epoch 13
631
632 ***** (104/288) *****
633 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 512})
634 Restoring model weights from the end of the best epoch: 8.
635 Epoch 15: early stopping
636 SCORE: 0.63151 at epoch 13
637
638 ***** (105/288) *****
639 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 64})
640 Restoring model weights from the end of the best epoch: 17.
641 Epoch 24: early stopping
642 SCORE: 0.66355 at epoch 17
643
644 ***** (106/288) *****
645 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 256})
646 Restoring model weights from the end of the best epoch: 8.
647 Epoch 15: early stopping
648 SCORE: 0.64619 at epoch 13
649
```

```
650 ***** (107/288) *****
651 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 128})
652 Restoring model weights from the end of the best epoch: 13.
653 Epoch 20: early stopping
654 SCORE: 0.66923 at epoch 13
655
656 ***** (108/288) *****
657 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 512})
658 Restoring model weights from the end of the best epoch: 4.
659 Epoch 11: early stopping
660 SCORE: 0.6235 at epoch 8
661
662 ***** (109/288) *****
663 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 64})
664 Restoring model weights from the end of the best epoch: 4.
665 Epoch 11: early stopping
666 SCORE: 0.63451 at epoch 8
667
668 ***** (110/288) *****
669 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 256})
670 Restoring model weights from the end of the best epoch: 4.
671 Epoch 11: early stopping
672 SCORE: 0.60915 at epoch 11
673
674 ***** (111/288) *****
675 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 128})
676 Restoring model weights from the end of the best epoch: 4.
677 Epoch 11: early stopping
678 SCORE: 0.61682 at epoch 11
679
680 ***** (112/288) *****
681 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 512})
682 Restoring model weights from the end of the best epoch: 4.
683 Epoch 11: early stopping
684 SCORE: 0.6215 at epoch 8
685
686 ***** (113/288) *****
687 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 64})
688 Restoring model weights from the end of the best epoch: 20.
689 Epoch 27: early stopping
690 SCORE: 0.63551 at epoch 13
691
692 ***** (114/288) *****
693 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 256})
694 Restoring model weights from the end of the best epoch: 20.
695 Epoch 27: early stopping
696 SCORE: 0.64786 at epoch 13
697
698 ***** (115/288) *****
699 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 128})
```

```
700 Restoring model weights from the end of the best epoch: 13.
701 Epoch 20: early stopping
702 SCORE: 0.64152 at epoch 13
703
704 ***** (116/288) *****
705 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 512})
706 Restoring model weights from the end of the best epoch: 17.
707 Epoch 24: early stopping
708 SCORE: 0.6512 at epoch 13
709
710 ***** (117/288) *****
711 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 64})
712 Restoring model weights from the end of the best epoch: 17.
713 Epoch 24: early stopping
714 SCORE: 0.65087 at epoch 16
715
716 ***** (118/288) *****
717 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 256})
718 Restoring model weights from the end of the best epoch: 8.
719 Epoch 15: early stopping
720 SCORE: 0.63284 at epoch 8
721
722 ***** (119/288) *****
723 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 128})
724 Restoring model weights from the end of the best epoch: 17.
725 Epoch 24: early stopping
726 SCORE: 0.64553 at epoch 20
727
728 ***** (120/288) *****
729 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 512})
730 Restoring model weights from the end of the best epoch: 4.
731 Epoch 11: early stopping
732 SCORE: 0.62283 at epoch 11
733
734 ***** (121/288) *****
735 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 64})
736 Restoring model weights from the end of the best epoch: 17.
737 Epoch 24: early stopping
738 SCORE: 0.66656 at epoch 13
739
740 ***** (122/288) *****
741 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 256})
742 Restoring model weights from the end of the best epoch: 17.
743 Epoch 24: early stopping
744 SCORE: 0.65387 at epoch 22
745
746 ***** (123/288) *****
747 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 128})
748 Restoring model weights from the end of the best epoch: 13.
749 Epoch 20: early stopping
750 SCORE: 0.63985 at epoch 13
```

```
751
752 ***** (124/288) *****
753 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 512})
754 Restoring model weights from the end of the best epoch: 17.
755 Epoch 24: early stopping
756 SCORE: 0.65854 at epoch 20
757
758 ***** (125/288) *****
759 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 64})
760 Restoring model weights from the end of the best epoch: 13.
761 Epoch 20: early stopping
762 SCORE: 0.63518 at epoch 16
763
764 ***** (126/288) *****
765 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 256})
766 Restoring model weights from the end of the best epoch: 4.
767 Epoch 11: early stopping
768 SCORE: 0.58344 at epoch 11
769
770 ***** (127/288) *****
771 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 128})
772 Restoring model weights from the end of the best epoch: 7.
773 Epoch 14: early stopping
774 SCORE: 0.5998 at epoch 8
775
776 ***** (128/288) *****
777 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 512})
778 Restoring model weights from the end of the best epoch: 4.
779 Epoch 11: early stopping
780 SCORE: 0.59379 at epoch 7
781
782 ***** (129/288) *****
783 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 64})
784 Restoring model weights from the end of the best epoch: 20.
785 Epoch 27: early stopping
786 SCORE: 0.64887 at epoch 16
787
788 ***** (130/288) *****
789 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 256})
790 Restoring model weights from the end of the best epoch: 16.
791 Epoch 23: early stopping
792 SCORE: 0.66021 at epoch 16
793
794 ***** (131/288) *****
795 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 128})
796 Restoring model weights from the end of the best epoch: 17.
797 Epoch 24: early stopping
798 SCORE: 0.64987 at epoch 20
799
800 ***** (132/288) *****
801 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
```



```
801 , 'batch_size': 25, 'nodecount': 64, 'nodecount2': 512})
802 Restoring model weights from the end of the best epoch: 17.
803 Epoch 24: early stopping
804 SCORE: 0.65187 at epoch 20
805
806 ***** (133/288) *****
807 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 64})
808 Restoring model weights from the end of the best epoch: 17.
809 Epoch 24: early stopping
810 SCORE: 0.64953 at epoch 16
811
812 ***** (134/288) *****
813 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 256})
814 Restoring model weights from the end of the best epoch: 8.
815 Epoch 15: early stopping
816 SCORE: 0.65287 at epoch 13
817
818 ***** (135/288) *****
819 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 128})
820 Restoring model weights from the end of the best epoch: 7.
821 Epoch 14: early stopping
822 SCORE: 0.65287 at epoch 13
823
824 ***** (136/288) *****
825 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 512})
826 Restoring model weights from the end of the best epoch: 4.
827 Epoch 11: early stopping
828 SCORE: 0.59079 at epoch 11
829
830 ***** (137/288) *****
831 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 64})
832 Restoring model weights from the end of the best epoch: 13.
833 Epoch 20: early stopping
834 SCORE: 0.6472 at epoch 13
835
836 ***** (138/288) *****
837 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 256})
838 Restoring model weights from the end of the best epoch: 11.
839 Epoch 18: early stopping
840 SCORE: 0.63919 at epoch 13
841
842 ***** (139/288) *****
843 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 128})
844 Restoring model weights from the end of the best epoch: 24.
845 Epoch 31: early stopping
846 SCORE: 0.65921 at epoch 13
847
848 ***** (140/288) *****
849 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 512})
850 Restoring model weights from the end of the best epoch: 4.
851 Epoch 11: early stopping
```

```
852 SCORE: 0.63652 at epoch 8
853
854 ***** (141/288) *****
855 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 64})
856 Restoring model weights from the end of the best epoch: 10.
857 Epoch 17: early stopping
858 SCORE: 0.65421 at epoch 16
859
860 ***** (142/288) *****
861 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 256})
862 Restoring model weights from the end of the best epoch: 4.
863 Epoch 11: early stopping
864 SCORE: 0.60247 at epoch 8
865
866 ***** (143/288) *****
867 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 128})
868 Restoring model weights from the end of the best epoch: 4.
869 Epoch 11: early stopping
870 SCORE: 0.56842 at epoch 11
871
872 ***** (144/288) *****
873 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 512})
874 Restoring model weights from the end of the best epoch: 4.
875 Epoch 11: early stopping
876 SCORE: 0.60347 at epoch 8
877
878 ***** (145/288) *****
879 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 64})
880 Restoring model weights from the end of the best epoch: 20.
881 Epoch 27: early stopping
882 SCORE: 0.6472 at epoch 13
883
884 ***** (146/288) *****
885 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 256})
886 Restoring model weights from the end of the best epoch: 20.
887 Epoch 27: early stopping
888 SCORE: 0.65354 at epoch 13
889
890 ***** (147/288) *****
891 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 128})
892 Restoring model weights from the end of the best epoch: 17.
893 Epoch 24: early stopping
894 SCORE: 0.64619 at epoch 13
895
896 ***** (148/288) *****
897 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 512})
898 Restoring model weights from the end of the best epoch: 13.
899 Epoch 20: early stopping
900 SCORE: 0.65888 at epoch 13
901
902 ***** (149/288) *****
```

```
903 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 64})
904 Restoring model weights from the end of the best epoch: 18.
905 Epoch 25: early stopping
906 SCORE: 0.65955 at epoch 16
907
908 ***** (150/288) *****
909 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 256})
910 Restoring model weights from the end of the best epoch: 13.
911 Epoch 20: early stopping
912 SCORE: 0.65955 at epoch 13
913
914 ***** (151/288) *****
915 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 128})
916 Restoring model weights from the end of the best epoch: 18.
917 Epoch 25: early stopping
918 SCORE: 0.6522 at epoch 18
919
920 ***** (152/288) *****
921 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 512})
922 Restoring model weights from the end of the best epoch: 8.
923 Epoch 15: early stopping
924 SCORE: 0.6492 at epoch 13
925
926 ***** (153/288) *****
927 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 64})
928 Restoring model weights from the end of the best epoch: 24.
929 Epoch 31: early stopping
930 SCORE: 0.65187 at epoch 24
931
932 ***** (154/288) *****
933 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 256})
934 Restoring model weights from the end of the best epoch: 17.
935 Epoch 24: early stopping
936 SCORE: 0.65688 at epoch 13
937
938 ***** (155/288) *****
939 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 128})
940 Restoring model weights from the end of the best epoch: 24.
941 Epoch 31: early stopping
942 SCORE: 0.65354 at epoch 24
943
944 ***** (156/288) *****
945 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 512})
946 Restoring model weights from the end of the best epoch: 13.
947 Epoch 20: early stopping
948 SCORE: 0.65154 at epoch 13
949
950 ***** (157/288) *****
951 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 64})
952 Restoring model weights from the end of the best epoch: 17.
```

```
953 Epoch 24: early stopping
954 SCORE: 0.64987 at epoch 17
955
956 ***** (158/288) *****
957 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 256})
958 Restoring model weights from the end of the best epoch: 4.
959 Epoch 11: early stopping
960 SCORE: 0.58211 at epoch 11
961
962 ***** (159/288) *****
963 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 128})
964 Restoring model weights from the end of the best epoch: 4.
965 Epoch 11: early stopping
966 SCORE: 0.58411 at epoch 11
967
968 ***** (160/288) *****
969 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 512})
970 Restoring model weights from the end of the best epoch: 4.
971 Epoch 11: early stopping
972 SCORE: 0.60214 at epoch 11
973
974 ***** (161/288) *****
975 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 64})
976 Restoring model weights from the end of the best epoch: 24.
977 Epoch 31: early stopping
978 SCORE: 0.64987 at epoch 20
979
980 ***** (162/288) *****
981 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 256})
982 Restoring model weights from the end of the best epoch: 16.
983 Epoch 23: early stopping
984 SCORE: 0.65854 at epoch 21
985
986 ***** (163/288) *****
987 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 128})
988 Restoring model weights from the end of the best epoch: 17.
989 Epoch 24: early stopping
990 SCORE: 0.6512 at epoch 13
991
992 ***** (164/288) *****
993 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 512})
994 Restoring model weights from the end of the best epoch: 24.
995 Epoch 31: early stopping
996 SCORE: 0.65688 at epoch 16
997
998 ***** (165/288) *****
999 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 64})
1000 Restoring model weights from the end of the best epoch: 16.
1001 Epoch 23: early stopping
1002 SCORE: 0.64786 at epoch 16
1003
```

```
1004 ***** (166/288) *****
1005 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 256})
1006 Restoring model weights from the end of the best epoch: 4.
1007 Epoch 11: early stopping
1008 SCORE: 0.57577 at epoch 11
1009
1010 ***** (167/288) *****
1011 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 128})
1012 Restoring model weights from the end of the best epoch: 7.
1013 Epoch 14: early stopping
1014 SCORE: 0.64519 at epoch 7
1015
1016 ***** (168/288) *****
1017 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 512})
1018 Restoring model weights from the end of the best epoch: 4.
1019 Epoch 11: early stopping
1020 SCORE: 0.61749 at epoch 3
1021
1022 ***** (169/288) *****
1023 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 64})
1024 Restoring model weights from the end of the best epoch: 16.
1025 Epoch 23: early stopping
1026 SCORE: 0.66455 at epoch 16
1027
1028 ***** (170/288) *****
1029 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 256})
1030 Restoring model weights from the end of the best epoch: 24.
1031 Epoch 31: early stopping
1032 SCORE: 0.65487 at epoch 24
1033
1034 ***** (171/288) *****
1035 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 128})
1036 Restoring model weights from the end of the best epoch: 17.
1037 Epoch 24: early stopping
1038 SCORE: 0.65587 at epoch 13
1039
1040 ***** (172/288) *****
1041 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 512})
1042 Restoring model weights from the end of the best epoch: 8.
1043 Epoch 15: early stopping
1044 SCORE: 0.64686 at epoch 8
1045
1046 ***** (173/288) *****
1047 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 64})
1048 Restoring model weights from the end of the best epoch: 24.
1049 Epoch 31: early stopping
1050 SCORE: 0.66055 at epoch 24
1051
1052 ***** (174/288) *****
1053 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 256})
```

```
1054 Restoring model weights from the end of the best epoch: 4.
1055 Epoch 11: early stopping
1056 SCORE: 0.59045 at epoch 3
1057
1058 ***** (175/288) *****
1059 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 128})
1060 Restoring model weights from the end of the best epoch: 4.
1061 Epoch 11: early stopping
1062 SCORE: 0.62817 at epoch 4
1063
1064 ***** (176/288) *****
1065 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 512})
1066 Restoring model weights from the end of the best epoch: 4.
1067 Epoch 11: early stopping
1068 SCORE: 0.60247 at epoch 3
1069
1070 ***** (177/288) *****
1071 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 64})
1072 Restoring model weights from the end of the best epoch: 25.
1073 Epoch 32: early stopping
1074 SCORE: 0.64252 at epoch 20
1075
1076 ***** (178/288) *****
1077 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 256})
1078 Restoring model weights from the end of the best epoch: 26.
1079 Epoch 33: early stopping
1080 SCORE: 0.66422 at epoch 32
1081
1082 ***** (179/288) *****
1083 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 128})
1084 Restoring model weights from the end of the best epoch: 20.
1085 Epoch 27: early stopping
1086 SCORE: 0.63818 at epoch 20
1087
1088 ***** (180/288) *****
1089 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 512})
1090 Restoring model weights from the end of the best epoch: 13.
1091 Epoch 20: early stopping
1092 SCORE: 0.65921 at epoch 13
1093
1094 ***** (181/288) *****
1095 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 64})
1096 Restoring model weights from the end of the best epoch: 25.
1097 Epoch 32: early stopping
1098 SCORE: 0.64453 at epoch 25
1099
1100 ***** (182/288) *****
1101 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 256})
1102 Restoring model weights from the end of the best epoch: 13.
1103 Epoch 20: early stopping
1104 SCORE: 0.65854 at epoch 13
```

```
1105
1106 ***** (183/288) *****
1107 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 128})
1108 Restoring model weights from the end of the best epoch: 8.
1109 Epoch 15: early stopping
1110 SCORE: 0.64519 at epoch 13
1111
1112 ***** (184/288) *****
1113 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 512})
1114 Restoring model weights from the end of the best epoch: 8.
1115 Epoch 15: early stopping
1116 SCORE: 0.65154 at epoch 13
1117
1118 ***** (185/288) *****
1119 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 64})
1120 Restoring model weights from the end of the best epoch: 24.
1121 Epoch 31: early stopping
1122 SCORE: 0.66188 at epoch 26
1123
1124 ***** (186/288) *****
1125 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 256})
1126 Restoring model weights from the end of the best epoch: 24.
1127 Epoch 31: early stopping
1128 SCORE: 0.65821 at epoch 16
1129
1130 ***** (187/288) *****
1131 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 128})
1132 Restoring model weights from the end of the best epoch: 13.
1133 Epoch 20: early stopping
1134 SCORE: 0.65788 at epoch 13
1135
1136 ***** (188/288) *****
1137 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 512})
1138 Restoring model weights from the end of the best epoch: 17.
1139 Epoch 24: early stopping
1140 SCORE: 0.66422 at epoch 17
1141
1142 ***** (189/288) *****
1143 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 64})
1144 Restoring model weights from the end of the best epoch: 17.
1145 Epoch 24: early stopping
1146 SCORE: 0.64753 at epoch 17
1147
1148 ***** (190/288) *****
1149 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 256})
1150 Restoring model weights from the end of the best epoch: 4.
1151 Epoch 11: early stopping
1152 SCORE: 0.59312 at epoch 11
1153
1154 ***** (191/288) *****
1155 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
```

```
1155 , 'batch_size': 50, 'nodecount': 512, 'nodecount2': 128})
1156 Restoring model weights from the end of the best epoch: 8.
1157 Epoch 15: early stopping
1158 SCORE: 0.62116 at epoch 13
1159
1160 ***** (192/288) *****
1161 Search({'activation': 'relu', 'optimizer': 'Nadam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 512})
1162 Restoring model weights from the end of the best epoch: 4.
1163 Epoch 11: early stopping
1164 SCORE: 0.60347 at epoch 11
1165
1166 ***** (193/288) *****
1167 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 64})
1168 Restoring model weights from the end of the best epoch: 10.
1169 Epoch 17: early stopping
1170 SCORE: 0.65254 at epoch 16
1171
1172 ***** (194/288) *****
1173 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 256})
1174 Restoring model weights from the end of the best epoch: 10.
1175 Epoch 17: early stopping
1176 SCORE: 0.64252 at epoch 7
1177
1178 ***** (195/288) *****
1179 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 128})
1180 Restoring model weights from the end of the best epoch: 17.
1181 Epoch 24: early stopping
1182 SCORE: 0.65788 at epoch 16
1183
1184 ***** (196/288) *****
1185 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 512})
1186 Restoring model weights from the end of the best epoch: 6.
1187 Epoch 13: early stopping
1188 SCORE: 0.63885 at epoch 6
1189
1190 ***** (197/288) *****
1191 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 64})
1192 Restoring model weights from the end of the best epoch: 3.
1193 Epoch 10: early stopping
1194 SCORE: 0.62049 at epoch 8
1195
1196 ***** (198/288) *****
1197 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 256})
1198 Restoring model weights from the end of the best epoch: 3.
1199 Epoch 10: early stopping
1200 SCORE: 0.61682 at epoch 6
1201
1202 ***** (199/288) *****
1203 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 128})
1204 Restoring model weights from the end of the best epoch: 7.
1205 Epoch 14: early stopping
```



```
1206 SCORE: 0.63318 at epoch 3
1207
1208 ***** (200/288) *****
1209 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 512})
1210 Restoring model weights from the end of the best epoch: 3.
1211 Epoch 10: early stopping
1212 SCORE: 0.65587 at epoch 7
1213
1214 ***** (201/288) *****
1215 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 64})
1216 Restoring model weights from the end of the best epoch: 17.
1217 Epoch 24: early stopping
1218 SCORE: 0.65788 at epoch 17
1219
1220 ***** (202/288) *****
1221 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 256})
1222 Restoring model weights from the end of the best epoch: 5.
1223 Epoch 12: early stopping
1224 SCORE: 0.61515 at epoch 6
1225
1226 ***** (203/288) *****
1227 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 128})
1228 Restoring model weights from the end of the best epoch: 10.
1229 Epoch 17: early stopping
1230 SCORE: 0.65587 at epoch 16
1231
1232 ***** (204/288) *****
1233 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 512})
1234 Restoring model weights from the end of the best epoch: 3.
1235 Epoch 10: early stopping
1236 SCORE: 0.60915 at epoch 5
1237
1238 ***** (205/288) *****
1239 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 64})
1240 Restoring model weights from the end of the best epoch: 7.
1241 Epoch 14: early stopping
1242 SCORE: 0.62817 at epoch 5
1243
1244 ***** (206/288) *****
1245 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 256})
1246 Restoring model weights from the end of the best epoch: 4.
1247 Epoch 11: early stopping
1248 SCORE: 0.61515 at epoch 7
1249
1250 ***** (207/288) *****
1251 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 128})
1252 Restoring model weights from the end of the best epoch: 7.
1253 Epoch 14: early stopping
1254 SCORE: 0.61282 at epoch 5
1255
1256 ***** (208/288) *****
```

```
1257 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 512})
1258 Restoring model weights from the end of the best epoch: 3.
1259 Epoch 10: early stopping
1260 SCORE: 0.63952 at epoch 3
1261
1262 ***** (209/288) *****
1263 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 64})
1264 Restoring model weights from the end of the best epoch: 24.
1265 Epoch 31: early stopping
1266 SCORE: 0.64619 at epoch 18
1267
1268 ***** (210/288) *****
1269 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 256})
1270 Restoring model weights from the end of the best epoch: 16.
1271 Epoch 23: early stopping
1272 SCORE: 0.64953 at epoch 18
1273
1274 ***** (211/288) *****
1275 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 128})
1276 Restoring model weights from the end of the best epoch: 24.
1277 Epoch 31: early stopping
1278 SCORE: 0.65788 at epoch 18
1279
1280 ***** (212/288) *****
1281 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 512})
1282 Restoring model weights from the end of the best epoch: 10.
1283 Epoch 17: early stopping
1284 SCORE: 0.6492 at epoch 16
1285
1286 ***** (213/288) *****
1287 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 64})
1288 Restoring model weights from the end of the best epoch: 7.
1289 Epoch 14: early stopping
1290 SCORE: 0.65754 at epoch 6
1291
1292 ***** (214/288) *****
1293 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 256})
1294 Restoring model weights from the end of the best epoch: 7.
1295 Epoch 14: early stopping
1296 SCORE: 0.63818 at epoch 4
1297
1298 ***** (215/288) *****
1299 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 128})
1300 Restoring model weights from the end of the best epoch: 7.
1301 Epoch 14: early stopping
1302 SCORE: 0.6472 at epoch 7
1303
1304 ***** (216/288) *****
1305 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 512})
1306 Restoring model weights from the end of the best epoch: 7.
```

```
1307 Epoch 14: early stopping
1308 SCORE: 0.63451 at epoch 10
1309
1310 ***** (217/288) *****
1311 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 64})
1312 Restoring model weights from the end of the best epoch: 7.
1313 Epoch 14: early stopping
1314 SCORE: 0.65154 at epoch 11
1315
1316 ***** (218/288) *****
1317 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 256})
1318 Restoring model weights from the end of the best epoch: 7.
1319 Epoch 14: early stopping
1320 SCORE: 0.63585 at epoch 7
1321
1322 ***** (219/288) *****
1323 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 128})
1324 Restoring model weights from the end of the best epoch: 7.
1325 Epoch 14: early stopping
1326 SCORE: 0.62617 at epoch 10
1327
1328 ***** (220/288) *****
1329 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 512})
1330 Restoring model weights from the end of the best epoch: 7.
1331 Epoch 14: early stopping
1332 SCORE: 0.63985 at epoch 7
1333
1334 ***** (221/288) *****
1335 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 64})
1336 Restoring model weights from the end of the best epoch: 17.
1337 Epoch 24: early stopping
1338 SCORE: 0.64887 at epoch 17
1339
1340 ***** (222/288) *****
1341 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 256})
1342 Restoring model weights from the end of the best epoch: 7.
1343 Epoch 14: early stopping
1344 SCORE: 0.6492 at epoch 7
1345
1346 ***** (223/288) *****
1347 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 128})
1348 Restoring model weights from the end of the best epoch: 7.
1349 Epoch 14: early stopping
1350 SCORE: 0.63919 at epoch 7
1351
1352 ***** (224/288) *****
1353 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.0, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 512})
1354 Restoring model weights from the end of the best epoch: 7.
1355 Epoch 14: early stopping
1356 SCORE: 0.64052 at epoch 14
1357
```

```
1358 ***** (225/288) *****
1359 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 64})
1360 Restoring model weights from the end of the best epoch: 17.
1361 Epoch 24: early stopping
1362 SCORE: 0.63318 at epoch 17
1363
1364 ***** (226/288) *****
1365 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 256})
1366 Restoring model weights from the end of the best epoch: 17.
1367 Epoch 24: early stopping
1368 SCORE: 0.65688 at epoch 21
1369
1370 ***** (227/288) *****
1371 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 128})
1372 Restoring model weights from the end of the best epoch: 17.
1373 Epoch 24: early stopping
1374 SCORE: 0.64686 at epoch 10
1375
1376 ***** (228/288) *****
1377 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 512})
1378 Restoring model weights from the end of the best epoch: 17.
1379 Epoch 24: early stopping
1380 SCORE: 0.64286 at epoch 21
1381
1382 ***** (229/288) *****
1383 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 64})
1384 Restoring model weights from the end of the best epoch: 7.
1385 Epoch 14: early stopping
1386 SCORE: 0.6018 at epoch 7
1387
1388 ***** (230/288) *****
1389 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 256})
1390 Restoring model weights from the end of the best epoch: 5.
1391 Epoch 12: early stopping
1392 SCORE: 0.62583 at epoch 5
1393
1394 ***** (231/288) *****
1395 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 128})
1396 Restoring model weights from the end of the best epoch: 7.
1397 Epoch 14: early stopping
1398 SCORE: 0.65087 at epoch 5
1399
1400 ***** (232/288) *****
1401 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 512})
1402 Restoring model weights from the end of the best epoch: 3.
1403 Epoch 10: early stopping
1404 SCORE: 0.62617 at epoch 7
1405
1406 ***** (233/288) *****
1407 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 64})
```

```
1408 Restoring model weights from the end of the best epoch: 16.
1409 Epoch 23: early stopping
1410 SCORE: 0.66522 at epoch 16
1411
1412 ***** (234/288) *****
1413 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 256})
1414 Restoring model weights from the end of the best epoch: 10.
1415 Epoch 17: early stopping
1416 SCORE: 0.64486 at epoch 17
1417
1418 ***** (235/288) *****
1419 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 128})
1420 Restoring model weights from the end of the best epoch: 10.
1421 Epoch 17: early stopping
1422 SCORE: 0.64619 at epoch 10
1423
1424 ***** (236/288) *****
1425 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 512})
1426 Restoring model weights from the end of the best epoch: 7.
1427 Epoch 14: early stopping
1428 SCORE: 0.63919 at epoch 10
1429
1430 ***** (237/288) *****
1431 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 64})
1432 Restoring model weights from the end of the best epoch: 7.
1433 Epoch 14: early stopping
1434 SCORE: 0.60514 at epoch 7
1435
1436 ***** (238/288) *****
1437 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 256})
1438 Restoring model weights from the end of the best epoch: 7.
1439 Epoch 14: early stopping
1440 SCORE: 0.63084 at epoch 7
1441
1442 ***** (239/288) *****
1443 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 128})
1444 Restoring model weights from the end of the best epoch: 7.
1445 Epoch 14: early stopping
1446 SCORE: 0.63618 at epoch 7
1447
1448 ***** (240/288) *****
1449 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 512})
1450 Restoring model weights from the end of the best epoch: 3.
1451 Epoch 10: early stopping
1452 SCORE: 0.63885 at epoch 3
1453
1454 ***** (241/288) *****
1455 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 64})
1456 Restoring model weights from the end of the best epoch: 24.
1457 Epoch 31: early stopping
1458 SCORE: 0.65087 at epoch 31
```

```
1459
1460 ***** (242/288) *****
1461 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 256})
1462 Restoring model weights from the end of the best epoch: 24.
1463 Epoch 31: early stopping
1464 SCORE: 0.65254 at epoch 11
1465
1466 ***** (243/288) *****
1467 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 128})
1468 Restoring model weights from the end of the best epoch: 41.
1469 Epoch 48: early stopping
1470 SCORE: 0.66288 at epoch 47
1471
1472 ***** (244/288) *****
1473 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 512})
1474 Restoring model weights from the end of the best epoch: 24.
1475 Epoch 31: early stopping
1476 SCORE: 0.6472 at epoch 20
1477
1478 ***** (245/288) *****
1479 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 64})
1480 Restoring model weights from the end of the best epoch: 16.
1481 Epoch 23: early stopping
1482 SCORE: 0.64252 at epoch 11
1483
1484 ***** (246/288) *****
1485 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 256})
1486 Restoring model weights from the end of the best epoch: 7.
1487 Epoch 14: early stopping
1488 SCORE: 0.63418 at epoch 3
1489
1490 ***** (247/288) *****
1491 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 128})
1492 Restoring model weights from the end of the best epoch: 16.
1493 Epoch 23: early stopping
1494 SCORE: 0.64486 at epoch 20
1495
1496 ***** (248/288) *****
1497 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 512})
1498 Restoring model weights from the end of the best epoch: 17.
1499 Epoch 24: early stopping
1500 SCORE: 0.65554 at epoch 18
1501
1502 ***** (249/288) *****
1503 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 64})
1504 Restoring model weights from the end of the best epoch: 24.
1505 Epoch 31: early stopping
1506 SCORE: 0.64553 at epoch 21
1507
1508 ***** (250/288) *****
1509 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
```

```
1509 , 'batch_size': 50, 'nodecount': 128, 'nodecount2': 256})
1510 Restoring model weights from the end of the best epoch: 13.
1511 Epoch 20: early stopping
1512 SCORE: 0.64019 at epoch 16
1513
1514 ***** (251/288) *****
1515 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 128})
1516 Restoring model weights from the end of the best epoch: 13.
1517 Epoch 20: early stopping
1518 SCORE: 0.65888 at epoch 18
1519
1520 ***** (252/288) *****
1521 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 512})
1522 Restoring model weights from the end of the best epoch: 6.
1523 Epoch 13: early stopping
1524 SCORE: 0.63251 at epoch 6
1525
1526 ***** (253/288) *****
1527 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 64})
1528 Restoring model weights from the end of the best epoch: 6.
1529 Epoch 13: early stopping
1530 SCORE: 0.62951 at epoch 10
1531
1532 ***** (254/288) *****
1533 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 256})
1534 Restoring model weights from the end of the best epoch: 5.
1535 Epoch 12: early stopping
1536 SCORE: 0.64019 at epoch 7
1537
1538 ***** (255/288) *****
1539 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 128})
1540 Restoring model weights from the end of the best epoch: 5.
1541 Epoch 12: early stopping
1542 SCORE: 0.61449 at epoch 12
1543
1544 ***** (256/288) *****
1545 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.1, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 512})
1546 Restoring model weights from the end of the best epoch: 5.
1547 Epoch 12: early stopping
1548 SCORE: 0.63351 at epoch 7
1549
1550 ***** (257/288) *****
1551 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 64})
1552 Restoring model weights from the end of the best epoch: 24.
1553 Epoch 31: early stopping
1554 SCORE: 0.63818 at epoch 26
1555
1556 ***** (258/288) *****
1557 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 256})
1558 Restoring model weights from the end of the best epoch: 7.
1559 Epoch 14: early stopping
```

```
1560 SCORE: 0.63017 at epoch 12
1561
1562 ***** (259/288) *****
1563 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 128})
1564 Restoring model weights from the end of the best epoch: 17.
1565 Epoch 24: early stopping
1566 SCORE: 0.63818 at epoch 21
1567
1568 ***** (260/288) *****
1569 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 64, 'nodecount2': 512})
1570 Restoring model weights from the end of the best epoch: 17.
1571 Epoch 24: early stopping
1572 SCORE: 0.63318 at epoch 17
1573
1574 ***** (261/288) *****
1575 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 64})
1576 Restoring model weights from the end of the best epoch: 7.
1577 Epoch 14: early stopping
1578 SCORE: 0.63117 at epoch 8
1579
1580 ***** (262/288) *****
1581 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 256})
1582 Restoring model weights from the end of the best epoch: 5.
1583 Epoch 12: early stopping
1584 SCORE: 0.63785 at epoch 7
1585
1586 ***** (263/288) *****
1587 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 128})
1588 Restoring model weights from the end of the best epoch: 5.
1589 Epoch 12: early stopping
1590 SCORE: 0.60614 at epoch 7
1591
1592 ***** (264/288) *****
1593 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 256, 'nodecount2': 512})
1594 Restoring model weights from the end of the best epoch: 5.
1595 Epoch 12: early stopping
1596 SCORE: 0.64686 at epoch 7
1597
1598 ***** (265/288) *****
1599 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 64})
1600 Restoring model weights from the end of the best epoch: 24.
1601 Epoch 31: early stopping
1602 SCORE: 0.64019 at epoch 27
1603
1604 ***** (266/288) *****
1605 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 256})
1606 Restoring model weights from the end of the best epoch: 7.
1607 Epoch 14: early stopping
1608 SCORE: 0.63919 at epoch 14
1609
1610 ***** (267/288) *****
```



```
1611 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 128})
1612 Restoring model weights from the end of the best epoch: 16.
1613 Epoch 23: early stopping
1614 SCORE: 0.66589 at epoch 21
1615
1616 ***** (268/288) *****
1617 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 128, 'nodecount2': 512})
1618 Restoring model weights from the end of the best epoch: 5.
1619 Epoch 12: early stopping
1620 SCORE: 0.64119 at epoch 10
1621
1622 ***** (269/288) *****
1623 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 64})
1624 Restoring model weights from the end of the best epoch: 5.
1625 Epoch 12: early stopping
1626 SCORE: 0.63919 at epoch 12
1627
1628 ***** (270/288) *****
1629 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 256})
1630 Restoring model weights from the end of the best epoch: 4.
1631 Epoch 11: early stopping
1632 SCORE: 0.63551 at epoch 5
1633
1634 ***** (271/288) *****
1635 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 128})
1636 Restoring model weights from the end of the best epoch: 5.
1637 Epoch 12: early stopping
1638 SCORE: 0.6285 at epoch 12
1639
1640 ***** (272/288) *****
1641 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 25, 'nodecount': 512, 'nodecount2': 512})
1642 Restoring model weights from the end of the best epoch: 4.
1643 Epoch 11: early stopping
1644 SCORE: 0.64386 at epoch 7
1645
1646 ***** (273/288) *****
1647 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 64})
1648 Restoring model weights from the end of the best epoch: 23.
1649 Epoch 30: early stopping
1650 SCORE: 0.64486 at epoch 28
1651
1652 ***** (274/288) *****
1653 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 256})
1654 Restoring model weights from the end of the best epoch: 24.
1655 Epoch 31: early stopping
1656 SCORE: 0.66055 at epoch 28
1657
1658 ***** (275/288) *****
1659 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 128})
1660 Restoring model weights from the end of the best epoch: 24.
```

```
1661 Epoch 31: early stopping
1662 SCORE: 0.64252 at epoch 24
1663
1664 ***** (276/288) *****
1665 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 64, 'nodecount2': 512})
1666 Restoring model weights from the end of the best epoch: 24.
1667 Epoch 31: early stopping
1668 SCORE: 0.6472 at epoch 18
1669
1670 ***** (277/288) *****
1671 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 64})
1672 Restoring model weights from the end of the best epoch: 17.
1673 Epoch 24: early stopping
1674 SCORE: 0.65621 at epoch 17
1675
1676 ***** (278/288) *****
1677 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 256})
1678 Restoring model weights from the end of the best epoch: 7.
1679 Epoch 14: early stopping
1680 SCORE: 0.62383 at epoch 11
1681
1682 ***** (279/288) *****
1683 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 128})
1684 Restoring model weights from the end of the best epoch: 23.
1685 Epoch 30: early stopping
1686 SCORE: 0.6522 at epoch 27
1687
1688 ***** (280/288) *****
1689 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 256, 'nodecount2': 512})
1690 Restoring model weights from the end of the best epoch: 6.
1691 Epoch 13: early stopping
1692 SCORE: 0.6275 at epoch 6
1693
1694 ***** (281/288) *****
1695 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 64})
1696 Restoring model weights from the end of the best epoch: 24.
1697 Epoch 31: early stopping
1698 SCORE: 0.65654 at epoch 23
1699
1700 ***** (282/288) *****
1701 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 256})
1702 Restoring model weights from the end of the best epoch: 16.
1703 Epoch 23: early stopping
1704 SCORE: 0.65654 at epoch 11
1705
1706 ***** (283/288) *****
1707 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 128})
1708 Restoring model weights from the end of the best epoch: 29.
1709 Epoch 36: early stopping
1710 SCORE: 0.65888 at epoch 18
1711
```

```
1712 ***** (284/288) *****
1713 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 512})
1714 Restoring model weights from the end of the best epoch: 8.
1715 Epoch 15: early stopping
1716 SCORE: 0.65421 at epoch 7
1717
1718 ***** (285/288) *****
1719 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 64})
1720 Restoring model weights from the end of the best epoch: 8.
1721 Epoch 15: early stopping
1722 SCORE: 0.58845 at epoch 2
1723
1724 ***** (286/288) *****
1725 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 256})
1726 Restoring model weights from the end of the best epoch: 6.
1727 Epoch 13: early stopping
1728 SCORE: 0.61449 at epoch 11
1729
1730 ***** (287/288) *****
1731 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 128})
1732 Restoring model weights from the end of the best epoch: 8.
1733 Epoch 15: early stopping
1734 SCORE: 0.61048 at epoch 7
1735
1736 ***** (288/288) *****
1737 Search({'activation': 'relu', 'optimizer': 'Adam', 'dropout_rate': 0.2, 'epochs': 150
, 'batch_size': 50, 'nodecount': 512, 'nodecount2': 512})
1738 Restoring model weights from the end of the best epoch: 6.
1739 Epoch 13: early stopping
1740 SCORE: 0.63385 at epoch 7
1741 Best: 0.673560 using {'activation': 'relu', 'optimizer': 'Adamax', 'dropout_rate': 0.1
, 'epochs': 38, 'batch_size': 50, 'nodecount': 128, 'nodecount2': 256, 'steps_per_epoch
': 149}
1742
1743 Process finished with exit code 0
1744
```