

A. Final SRI-based one class classifier to detect anomalies in CarChallenge_driving data

Classifier 2 classifier to distinguish normal and attack in CarChallenge2020 dataset

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1: if row['Arbitration_ID'] == '2B0' then:
2:   if row['TimeInterval'] < 0.0002098083496093375 and row['D1'] >= 237.5 then:
3:     return 'normal'
4:   else if row['DLC'] < 6.5 and row['D1'] >= 237.5 then:
5:     return 'normal'
6:   else if row['DLC'] < 6.5 and row['P_CAN_ID_164'] >= 0.5 then:
7:     return 'normal'
8:   else if row['DLC'] < 6.5 and row['N_CAN_ID_367'] >= 0.5 then:
9:     return 'normal'
10:  else if row['P_CAN_ID_251'] >= 0.5 and row['D4'] >= 50.5 then:
11:    return 'normal'
12:  else if row['P_CAN_ID_251'] >= 0.5 and row['D3'] < 7.5 then:
13:    return 'normal'
14:  else if row['TimeInterval'] < 0.0002100467681884383 and row['D3'] < 7.5 and row['D3'] >= 6.5 then:
15:    return 'normal'
16:  else
17:    return 'attack'
18: else if row['Arbitration_ID'] == '4A2' then:
19:   if row['DLC'] < 3.0 then:
20:     return 'normal'
21:   else
22:     return 'attack'
23: else if row['Arbitration_ID'] == '4A7' then:
24:   if row['P_CAN_ID_42D'] >= 0.5 then:
25:     return 'normal'
26:   else if row['TimeInterval'] < 0.00013303756713863593 then:
27:     return 'normal'
28:   else
29:     return 'attack'
30: else if row['Arbitration_ID'] == '4A9' then:
31:   if row['TimePeriod'] >= 0.14987063407897946 and row['N_CAN_ID_53F'] >= 0.5 then:
32:     return 'normal'
33:   else if row['TimePeriod'] >= 0.14987063407897946 and row['P_CAN_ID_490'] >= 0.5 then:
34:     return 'normal'
35:   else if row['TimePeriod'] >= 0.14987063407897946 and row['N_CAN_ID_4F1'] >= 0.5 then:
36:     return 'normal'
37:   else if row['TimePeriod'] >= 0.14987063407897946 and row['P_CAN_ID_470'] >= 0.5 then:
38:     return 'normal'
39:   else if row['TimePeriod'] >= 0.14987063407897946 and row['N_CAN_ID_153'] >= 0.5 then:
40:     return 'normal'
41:   else if row['D4'] < 0.5 and row['P_CAN_ID_495'] >= 0.5 then:
42:     return 'normal'
43:   else
44:     return 'attack'
45: else if row['Arbitration_ID'] == '4C9' then:
46:   if row['TimePeriod'] >= 0.18928706645965573 then:
47:     return 'normal'
48:   else
49:     return 'attack'
50: else if row['Arbitration_ID'] == '4CB' then:
51:   if row['N_CAN_ID_53B'] >= 0.5 then:
52:     return 'normal'
53:   else if row['TimePeriod'] >= 0.11013698577880858 and row['D0'] >= 127.5 then:
54:     return 'normal'
55:   else if row['TimePeriod'] >= 0.11013698577880858 and row['P_CAN_ID_386'] >= 0.5 then:
56:     return 'normal'
57:   else
58:     return 'attack'
59: else if row['Arbitration_ID'] == '4F1' then:
60:   if row['TimeInterval'] < 0.00017189979553221328 and row['D2'] >= 95.5 then:
61:     return 'normal'
62:   else if row['DLC'] < 4.5 and row['D2'] >= 95.5 then:
63:     return 'normal'
64:   else
65:     return 'attack'
66: else if row['Arbitration_ID'] == '5A6' then:
67:   if row['TimePeriod'] >= 0.1499644517898559 and row['P_CAN_ID_53B'] >= 0.5 then:
68:     return 'normal'
69:   else if row['TimePeriod'] >= 0.1499644517898559 and row['P_CAN_ID_53E'] >= 0.5 then:
70:     return 'normal'
71:   else if row['TimePeriod'] >= 0.1499644517898559 and row['P_CAN_ID_140'] >= 0.5 then:
72:     return 'normal'
73:   else if row['TimePeriod'] >= 0.1997115612030029 and row['N_CAN_ID_329'] >= 0.5 then:
74:     return 'normal'
75:   else
76:     return 'attack'
77: else if row['Arbitration_ID'] == '5B0' then:
78:   if row['TimePeriod'] >= 0.5980401039123535 then:
79:     return 'normal'
80:   else
81:     return 'attack'

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82: else if row['Arbitration_ID'] == '5BE' then:
83:   if row['TimePeriod'] >= 0.7492915391921997 then:
84:     return 'normal'
85:   else
86:     return 'attack'
87: else if row['Arbitration_ID'] == '5CD' then:
88:   if row['P_CAN_ID_5B0'] >= 0.5 then:
89:     return 'normal'
90:   else if row['TimeInterval'] >= 0.00024652481079100625 and row['P_CAN_ID_52A'] >= 0.5 then:
91:     return 'normal'
92:   else if row['TimePeriod'] >= 0.14878189563751215 then:
93:     return 'normal'
94:   else
95:     return 'attack'
96: else if row['Arbitration_ID'] == '07F' then:
97:   if row['TimePeriod'] >= 0.5997545719146729 then:
98:     return 'normal'
99:   else
100:    return 'attack'
101: else if row['Arbitration_ID'] == '38D' then:
102:   if row['D6'] >= 253.5 and row['D4'] >= 127.5 then:
103:     return 'normal'
104:   else
105:     return 'attack'
106: else if row['Arbitration_ID'] == '42D' then:
107:   if row['N_CAN_ID_4A7'] >= 0.5 then:
108:     return 'normal'
109:   else if row['D7'] >= 249.0 and row['TimePeriod'] >= 0.08437347412109374 then:
110:     return 'normal'
111:   else if row['TimePeriod'] >= 0.08437347412109374 and row['P_CAN_ID_340'] >= 0.5 then:
112:     return 'normal'
113:   else if row['TimePeriod'] >= 0.08437347412109374 and row['D3'] < 0.5 and row['P_CAN_ID_220'] >= 0.5 then:
114:     return 'normal'
115:   else
116:     return 'attack'
117: else if row['Arbitration_ID'] == '043' then:
118:   if row['TimePeriod'] >= 0.5987275838851929 then:
119:     return 'normal'
120:   else
121:     return 'attack'
122: else if row['Arbitration_ID'] == '44E' then:
123:   if row['TimePeriod'] >= 0.15039348602294922 and row['P_CAN_ID_368'] >= 0.5 then:
124:     return 'normal'
125:   else if row['TimePeriod'] >= 0.15039348602294922 and row['D1'] < 0.5 and row['N_CAN_ID_356'] >= 0.5 then:
126:     return 'normal'
127:   else if row['TimePeriod'] >= 0.15039348602294922 then:
128:     return 'normal'
129:   else
130:     return 'attack'
131: else if row['Arbitration_ID'] == '47F' then:
132:   if row['D2'] >= 254.5 and row['N_CAN_ID_153'] >= 0.5 then:
133:     return 'normal'
134:   else if row['D2'] >= 254.5 and row['P_CAN_ID_220'] >= 0.5 then:
135:     return 'normal'
136:   else if row['D2'] >= 254.5 and row['P_CAN_ID_340'] >= 0.5 then:
137:     return 'normal'
138:   else if row['D2'] >= 254.5 and row['P_CAN_ID_389'] >= 0.5 then:
139:     return 'normal'
140:   else if row['D2'] >= 254.5 and row['N_CAN_ID_38D'] >= 0.5 then:
141:     return 'normal'
142:   else if row['D2'] >= 254.5 and row['N_CAN_ID_4F1'] >= 0.5 then:
143:     return 'normal'
144:   else if row['D2'] >= 254.5 and row['D3'] >= 248.5 and row['D7'] >= 70.5 then:
145:     return 'normal'
146:   else if row['D2'] >= 254.5 and row['D3'] >= 248.5 and row['D3'] < 251.0 then:
147:     return 'normal'
148:   else
149:     return 'attack'
150: else if row['Arbitration_ID'] == '48A' then:
151:   if row['TimePeriod'] >= 0.046218514442443806 and row['N_CAN_ID_50E'] >= 0.5 then:
152:     return 'normal'
153:   else if row['D7'] >= 83.5 and row['P_CAN_ID_4C9'] >= 0.5 then:
154:     return 'normal'
155:   else if row['D2'] >= 64.5 and row['N_CAN_ID_4C9'] >= 0.5 then:
156:     return 'normal'
157:   else if row['P_CAN_ID_485'] >= 0.5 and row['N_CAN_ID_568'] >= 0.5 then:
158:     return 'normal'
159:   else if row['P_CAN_ID_485'] >= 0.5 and row['N_CAN_ID_58B'] >= 0.5 then:
160:     return 'normal'
161:   else if row['N_CAN_ID_58B'] >= 0.5 and row['P_CAN_ID_386'] >= 0.5 then:
162:     return 'normal'
163:   else if row['N_CAN_ID_58B'] >= 0.5 and row['P_CAN_ID_368'] >= 0.5 then:
164:     return 'normal'
165:   else if row['TimePeriod'] >= 0.046218514442443806 and row['N_CAN_ID_4C9'] >= 0.5 then:

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166:     return 'normal'
167: else if row['TimePeriod'] >= 0.046218514442443806 and row['D6'] >= 31.5 and row['N_CAN_ID_38D'] >= 0.5 then:
168:     return 'normal'
169: else if row['D1'] < 0.5 and row['D3'] >= 63.5 and row['P_CAN_ID_470'] >= 0.5 then:
170:     return 'normal'
171: else if row['D3'] >= 63.5 and row['D0'] < 0.5 and row['D3'] < 65.5 then:
172:     return 'normal'
173: else
174:     return 'attack'
175: else if row['Arbitration_ID'] == '48C' then:
176:     if row['TimePeriod'] >= 0.15755498409271235 and row['N_CAN_ID_38D'] >= 0.5 then:
177:         return 'normal'
178:     else if row['TimePeriod'] >= 0.15755498409271235 and row['P_CAN_ID_220'] >= 0.5 then:
179:         return 'normal'
180:     else if row['TimePeriod'] >= 0.15755498409271235 and row['P_CAN_ID_47F'] >= 0.5 then:
181:         return 'normal'
182:     else if row['TimePeriod'] >= 0.15755498409271235 and row['N_CAN_ID_381'] >= 0.5 then:
183:         return 'normal'
184:     else if row['TimePeriod'] >= 0.15755498409271235 and row['P_CAN_ID_140'] >= 0.5 then:
185:         return 'normal'
186:     else if row['D0'] >= 75.0 and row['N_CAN_ID_58B'] >= 0.5 then:
187:         return 'normal'
188:     else if row['D3'] < 0.5 and row['P_CAN_ID_58B'] >= 0.5 then:
189:         return 'normal'
190:     else if row['TimePeriod'] >= 0.15755498409271235 and row['D0'] >= 75.0 and row['D0'] < 76.5 then:
191:         return 'normal'
192:     else
193:         return 'attack'
194: else if row['Arbitration_ID'] == '49F' then:
195:     if row['D1'] >= 254.5 and row['TimePeriod'] >= 0.19925248622894284 then:
196:         return 'normal'
197:     else
198:         return 'attack'
199: else if row['Arbitration_ID'] == '50A' then:
200:     if row['TimePeriod'] >= 0.19898688793182367 and row['N_CAN_ID_389'] >= 0.5 then:
201:         return 'normal'
202:     else if row['TimePeriod'] >= 0.19898688793182367 and row['P_CAN_ID_421'] >= 0.5 then:
203:         return 'normal'
204:     else if row['TimePeriod'] >= 0.19898688793182367 and row['N_CAN_ID_153'] >= 0.5 then:
205:         return 'normal'
206:     else if row['TimePeriod'] >= 0.19898688793182367 and row['D1'] < 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
207:         return 'normal'
208:     else if row['D3'] < 0.5 and row['D0'] >= 9.5 and row['D0'] < 10.5 then:
209:         return 'normal'
210:     else
211:         return 'attack'
212: else if row['Arbitration_ID'] == '50C' then:
213:     if row['TimePeriod'] >= 0.08405351638793945 and row['N_CAN_ID_492'] >= 0.5 then:
214:         return 'normal'
215:     else if row['TimePeriod'] >= 0.08405351638793945 and row['N_CAN_ID_48A'] >= 0.5 then:
216:         return 'normal'
217:     else if row['TimePeriod'] >= 0.08405351638793945 and row['P_CAN_ID_47F'] >= 0.5 then:
218:         return 'normal'
219:     else if row['P_CAN_ID_4F1'] >= 0.5 and row['N_CAN_ID_52A'] >= 0.5 then:
220:         return 'normal'
221:     else if row['D7'] >= 81.5 and row['N_CAN_ID_52A'] >= 0.5 then:
222:         return 'normal'
223:     else if row['D4'] >= 5.5 and row['N_CAN_ID_52A'] >= 0.5 then:
224:         return 'normal'
225:     else if row['P_CAN_ID_500'] >= 0.5 and row['N_CAN_ID_58B'] >= 0.5 then:
226:         return 'normal'
227:     else if row['TimePeriod'] >= 0.08405351638793945 and row['P_CAN_ID_4F1'] >= 0.5 and row['D5'] >= 15.5 then:
228:         return 'normal'
229:     else if row['TimePeriod'] >= 0.08405351638793945 and row['D6'] < 0.5 and row['D7'] >= 81.5 then:
230:         return 'normal'
231:     else if row['TimePeriod'] >= 0.08405351638793945 and row['D2'] < 0.5 and row['D1'] >= 13.5 then:
232:         return 'normal'
233:     else
234:         return 'attack'
235: else if row['Arbitration_ID'] == '50E' then:
236:     if row['TimePeriod'] >= 0.15068113803863523 and row['N_CAN_ID_563'] >= 0.5 then:
237:         return 'normal'
238:     else if row['TimePeriod'] >= 0.15068113803863523 and row['P_CAN_ID_260'] >= 0.5 then:
239:         return 'normal'
240:     else if row['TimePeriod'] >= 0.15068113803863523 and row['N_CAN_ID_568'] >= 0.5 then:
241:         return 'normal'
242:     else if row['TimePeriod'] >= 0.15068113803863523 and row['N_CAN_ID_153'] >= 0.5 then:
243:         return 'normal'
244:     else if row['P_CAN_ID_48A'] >= 0.5 and row['N_CAN_ID_260'] >= 0.5 then:
245:         return 'normal'
246:     else if row['D4'] >= 9.5 and row['D4'] < 11.0 then:
247:         return 'normal'
248:     else
249:         return 'attack'
250: else if row['Arbitration_ID'] == '52A' then:

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251: if row['N_CAN_ID_5B0'] >= 0.5 then:
252:     return 'normal'
253: else if row['D7'] >= 165.5 and row['P_CAN_ID_50C'] >= 0.5 then:
254:     return 'normal'
255: else if row['D1'] < 0.5 and row['N_CAN_ID_541'] >= 0.5 then:
256:     return 'normal'
257: else if row['D7'] >= 165.5 and row['TimePeriod'] >= 0.029659032821655273 and row['N_CAN_ID_38D'] >= 0.5 then:
258:     return 'normal'
259: else if row['D7'] >= 165.5 and row['D3'] < 0.5 and row['P_CAN_ID_4F1'] >= 0.5 then:
260:     return 'normal'
261: else if row['D7'] >= 165.5 and row['D3'] < 0.5 and row['N_CAN_ID_5CD'] >= 0.5 then:
262:     return 'normal'
263: else if row['D7'] >= 165.5 and row['D1'] < 0.5 and row['D0'] >= 6.5 then:
264:     return 'normal'
265: else if row['D7'] >= 165.5 and row['N_CAN_ID_58B'] >= 0.5 then:
266:     return 'normal'
267: else if row['D7'] >= 165.5 and row['TimePeriod'] >= 0.029659032821655273 and row['D7'] < 166.5 then:
268:     return 'normal'
269: else
270:     return 'attack'
271: else if row['Arbitration_ID'] == '53B' then:
272:     if row['TimePeriod'] >= 0.1511639356613159 and row['P_CAN_ID_4CB'] >= 0.5 then:
273:         return 'normal'
274:     else if row['TimePeriod'] >= 0.1511639356613159 and row['N_CAN_ID_5A6'] >= 0.5 then:
275:         return 'normal'
276:     else if row['TimePeriod'] >= 0.1511639356613159 and row['N_CAN_ID_53E'] >= 0.5 then:
277:         return 'normal'
278:     else if row['TimePeriod'] >= 0.1511639356613159 and row['D3'] < 0.5 and row['P_CAN_ID_4F1'] >= 0.5 then:
279:         return 'normal'
280:     else
281:         return 'attack'
282: else if row['Arbitration_ID'] == '53E' then:
283:     if row['TimePeriod'] >= 0.08372187614440917 and row['P_CAN_ID_484'] >= 0.5 then:
284:         return 'normal'
285:     else if row['TimePeriod'] >= 0.08372187614440917 and row['N_CAN_ID_593'] >= 0.5 then:
286:         return 'normal'
287:     else if row['D5'] >= 132.5 and row['P_CAN_ID_42D'] >= 0.5 then:
288:         return 'normal'
289:     else if row['D5'] >= 132.5 and row['N_CAN_ID_5A6'] >= 0.5 then:
290:         return 'normal'
291:     else if row['D5'] >= 132.5 and row['P_CAN_ID_4A7'] >= 0.5 then:
292:         return 'normal'
293:     else if row['TimePeriod'] >= 0.08882594108581542 and row['D5'] >= 132.5 and row['D5'] < 133.5 then:
294:         return 'normal'
295:     else
296:         return 'attack'
297: else if row['Arbitration_ID'] == '53F' then:
298:     if row['TimePeriod'] >= 0.19865906238555903 and row['P_CAN_ID_4A9'] >= 0.5 then:
299:         return 'normal'
300:     else if row['TimePeriod'] >= 0.19865906238555903 and row['P_CAN_ID_500'] >= 0.5 then:
301:         return 'normal'
302:     else if row['TimePeriod'] >= 0.19865906238555903 and row['TimeInterval'] >= 0.0002495050430297664 then:
303:         return 'normal'
304:     else
305:         return 'attack'
306: else if row['Arbitration_ID'] == '57F' then:
307:     if row['TimePeriod'] >= 1.0995310544967651 then:
308:         return 'normal'
309:     else
310:         return 'attack'
311: else if row['Arbitration_ID'] == '58B' then:
312:     if row['P_CAN_ID_57F'] >= 0.5 then:
313:         return 'normal'
314:     else if row['TimePeriod'] >= 0.04258000850677486 and row['P_CAN_ID_568'] >= 0.5 then:
315:         return 'normal'
316:     else if row['TimePeriod'] >= 0.04258000850677486 and row['P_CAN_ID_50E'] >= 0.5 then:
317:         return 'normal'
318:     else if row['TimePeriod'] >= 0.04258000850677486 and row['N_CAN_ID_593'] >= 0.5 then:
319:         return 'normal'
320:     else if row['D3'] < 0.5 and row['P_CAN_ID_4C9'] >= 0.5 then:
321:         return 'normal'
322:     else if row['D3'] < 0.5 and row['N_CAN_ID_220'] >= 0.5 then:
323:         return 'normal'
324:     else if row['D3'] < 0.5 and row['N_CAN_ID_5CD'] >= 0.5 then:
325:         return 'normal'
326:     else if row['TimeInterval'] >= 0.0002454519271850531 and row['N_CAN_ID_568'] >= 0.5 then:
327:         return 'normal'
328:     else if row['D7'] < 0.5 and row['P_CAN_ID_48C'] >= 0.5 then:
329:         return 'normal'
330:     else if row['D0'] >= 16.5 and row['N_CAN_ID_48C'] >= 0.5 then:
331:         return 'normal'
332:     else if row['N_CAN_ID_329'] >= 0.5 and row['P_CAN_ID_48A'] >= 0.5 then:
333:         return 'normal'
334:     else if row['N_CAN_ID_260'] >= 0.5 and row['P_CAN_ID_50C'] >= 0.5 then:
335:         return 'normal'

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336:     else if row['P_CAN_ID_48A'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
337:         return 'normal'
338:     else if row['P_CAN_ID_329'] >= 0.5 and row['N_CAN_ID_47F'] >= 0.5 then:
339:         return 'normal'
340:     else if row['P_CAN_ID_329'] >= 0.5 and row['N_CAN_ID_38D'] >= 0.5 then:
341:         return 'normal'
342:     else if row['TimePeriod'] >= 0.04258000850677486 and row['D3'] < 0.5 and row['P_CAN_ID_153'] >= 0.5 then:
343:         return 'normal'
344:     else if row['TimePeriod'] >= 0.04258000850677486 and row['D3'] < 0.5 and row['P_CAN_ID_356'] >= 0.5 then:
345:         return 'normal'
346:     else if row['TimePeriod'] >= 0.04258000850677486 and row['TimeInterval'] >= 0.0002454519271850531 and row['N_CAN_ID_329'] >= 0.5 then:
347:         return 'normal'
348:     else if row['TimePeriod'] >= 0.04258000850677486 and row['D7'] < 0.5 and row['P_CAN_ID_50C'] >= 0.5 then:
349:         return 'normal'
350:     else if row['TimePeriod'] >= 0.04258000850677486 and row['D0'] >= 16.5 and row['D0'] < 17.5 then:
351:         return 'normal'
352:     else if row['D0'] >= 16.5 and row['P_CAN_ID_48A'] >= 0.5 then:
353:         return 'normal'
354:     else if row['TimePeriod'] >= 0.04258000850677486 and row['D0'] >= 16.5 and row['D0'] < 18.5 then:
355:         return 'normal'
356:     else
357:         return 'attack'
358:     else if row['Arbitration_ID'] == 130 then:
359:         if row['N_CAN_ID_140'] >= 0.5 then:
360:             return 'normal'
361:         else
362:             return 'attack'
363:     else if row['Arbitration_ID'] == 140 then:
364:         if row['P_CAN_ID_130'] >= 0.5 then:
365:             return 'normal'
366:         else
367:             return 'attack'
368:     else if row['Arbitration_ID'] == 153 then:
369:         if row['D5'] >= 254.5 and row['P_CAN_ID_47F'] >= 0.5 then:
370:             return 'normal'
371:         else if row['D5'] >= 254.5 and row['P_CAN_ID_260'] >= 0.5 then:
372:             return 'normal'
373:         else if row['D5'] >= 254.5 and row['N_CAN_ID_492'] >= 0.5 then:
374:             return 'normal'
375:         else if row['D5'] >= 254.5 and row['P_CAN_ID_421'] >= 0.5 then:
376:             return 'normal'
377:         else if row['D5'] >= 254.5 and row['P_CAN_ID_340'] >= 0.5 then:
378:             return 'normal'
379:         else if row['D5'] >= 254.5 and row['P_CAN_ID_420'] >= 0.5 then:
380:             return 'normal'
381:         else if row['D5'] >= 254.5 and row['N_CAN_ID_593'] >= 0.5 then:
382:             return 'normal'
383:         else if row['D5'] >= 254.5 and row['P_CAN_ID_389'] >= 0.5 then:
384:             return 'normal'
385:         else if row['D5'] >= 254.5 and row['P_CAN_ID_38D'] >= 0.5 then:
386:             return 'normal'
387:         else if row['D5'] >= 254.5 and row['P_CAN_ID_53F'] >= 0.5 then:
388:             return 'normal'
389:         else if row['D5'] >= 254.5 and row['N_CAN_ID_58B'] >= 0.5 then:
390:             return 'normal'
391:         else if row['D5'] >= 254.5 and row['P_CAN_ID_391'] >= 0.5 then:
392:             return 'normal'
393:         else if row['D5'] >= 254.5 and row['P_CAN_ID_4F1'] >= 0.5 then:
394:             return 'normal'
395:         else if row['D5'] >= 254.5 and row['P_CAN_ID_553'] >= 0.5 then:
396:             return 'normal'
397:         else if row['D5'] >= 254.5 and row['P_CAN_ID_559'] >= 0.5 then:
398:             return 'normal'
399:         else if row['D3'] >= 254.5 and row['D1'] >= 127.5 then:
400:             return 'normal'
401:         else
402:             return 'attack'
403:     else if row['Arbitration_ID'] == 164 then:
404:         if row['DLC'] < 4.5 and row['N_CAN_ID_2B0'] >= 0.5 then:
405:             return 'normal'
406:         else if row['DLC'] < 4.5 and row['P_CAN_ID_381'] >= 0.5 then:
407:             return 'normal'
408:         else if row['DLC'] < 4.5 and row['P_CAN_ID_4F1'] >= 0.5 then:
409:             return 'normal'
410:         else if row['DLC'] < 4.5 and row['N_CAN_ID_366'] >= 0.5 then:
411:             return 'normal'
412:         else if row['DLC'] < 4.5 and row['P_CAN_ID_492'] >= 0.5 then:
413:             return 'normal'
414:         else if row['DLC'] < 4.5 and row['P_CAN_ID_53E'] >= 0.5 then:
415:             return 'normal'
416:         else if row['DLC'] < 4.5 and row['P_CAN_ID_420'] >= 0.5 then:
417:             return 'normal'
418:         else if row['DLC'] < 4.5 and row['P_CAN_ID_366'] >= 0.5 then:
419:             return 'normal'
420:         else if row['DLC'] < 4.5 and row['P_CAN_ID_593'] >= 0.5 then:

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421:     return 'normal'
422: else if row['DLC'] < 4.5 and row['P_CAN_ID_50C'] >= 0.5 then:
423:     return 'normal'
424: else if row['DLC'] < 4.5 and row['P_CAN_ID_568'] >= 0.5 then:
425:     return 'normal'
426: else if row['DLC'] < 4.5 and row['P_CAN_ID_5CD'] >= 0.5 then:
427:     return 'normal'
428: else if row['N_CAN_ID_251'] >= 0.5 and row['P_CAN_ID_490'] >= 0.5 then:
429:     return 'normal'
430: else if row['N_CAN_ID_251'] >= 0.5 and row['P_CAN_ID_356'] >= 0.5 then:
431:     return 'normal'
432: else if row['N_CAN_ID_251'] >= 0.5 and row['P_CAN_ID_394'] >= 0.5 then:
433:     return 'normal'
434: else if row['N_CAN_ID_251'] >= 0.5 and row['P_CAN_ID_500'] >= 0.5 then:
435:     return 'normal'
436: else if row['N_CAN_ID_251'] >= 0.5 and row['P_CAN_ID_38D'] >= 0.5 then:
437:     return 'normal'
438: else if row['N_CAN_ID_251'] >= 0.5 and row['P_CAN_ID_391'] >= 0.5 then:
439:     return 'normal'
440: else if row['N_CAN_ID_251'] >= 0.5 and row['P_CAN_ID_220'] >= 0.5 then:
441:     return 'normal'
442: else if row['N_CAN_ID_251'] >= 0.5 and row['P_CAN_ID_52A'] >= 0.5 then:
443:     return 'normal'
444: else if row['DLC'] < 4.5 and row['N_CAN_ID_251'] >= 0.5 and row['D3'] >= 54.5 then:
445:     return 'normal'
446: else if row['DLC'] < 4.5 and row['N_CAN_ID_251'] >= 0.5 and row['D1'] >= 7.5 then:
447:     return 'normal'
448: else if row['DLC'] < 4.5 and row['D1'] < 8.5 and row['D1'] >= 7.5 then:
449:     return 'normal'
450: else
451:     return 'attack'
452: else if row['Arbitration_ID'] == 220' then:
453:     if row['P_CAN_ID_153'] >= 0.5 and row['N_CAN_ID_260'] >= 0.5 then:
454:         return 'normal'
455:     else if row['P_CAN_ID_153'] >= 0.5 and row['N_CAN_ID_420'] >= 0.5 then:
456:         return 'normal'
457:     else if row['P_CAN_ID_153'] >= 0.5 and row['N_CAN_ID_48C'] >= 0.5 then:
458:         return 'normal'
459:     else if row['P_CAN_ID_153'] >= 0.5 and row['N_CAN_ID_568'] >= 0.5 then:
460:         return 'normal'
461:     else if row['D2'] >= 108.5 and row['D3'] < 0.5 and row['P_CAN_ID_153'] >= 0.5 then:
462:         return 'normal'
463:     else if row['D2'] >= 108.5 and row['D3'] < 0.5 and row['N_CAN_ID_153'] >= 0.5 then:
464:         return 'normal'
465:     else if row['D2'] >= 108.5 and row['D3'] < 0.5 and row['P_CAN_ID_329'] >= 0.5 then:
466:         return 'normal'
467:     else if row['D2'] >= 108.5 and row['D3'] < 0.5 and row['N_CAN_ID_329'] >= 0.5 then:
468:         return 'normal'
469:     else if row['D2'] >= 108.5 and row['D4'] < 0.5 and row['N_CAN_ID_47F'] >= 0.5 then:
470:         return 'normal'
471:     else if row['P_CAN_ID_153'] >= 0.5 and row['D3'] < 8.5 and row['D5'] >= 18.5 then:
472:         return 'normal'
473:     else if row['P_CAN_ID_153'] >= 0.5 and row['D5'] >= 52.5 and row['D0'] >= 7.5 then:
474:         return 'normal'
475:     else if row['P_CAN_ID_153'] >= 0.5 and row['D0'] >= 7.5 and row['N_CAN_ID_38D'] >= 0.5 then:
476:         return 'normal'
477:     else if row['D3'] < 8.5 and row['D1'] >= 34.5 and row['N_CAN_ID_153'] >= 0.5 then:
478:         return 'normal'
479:     else if row['P_CAN_ID_153'] >= 0.5 and row['N_CAN_ID_38D'] >= 0.5 then:
480:         return 'normal'
481:     else if row['N_CAN_ID_153'] >= 0.5 and row['P_CAN_ID_470'] >= 0.5 then:
482:         return 'normal'
483:     else if row['N_CAN_ID_153'] >= 0.5 and row['P_CAN_ID_5CD'] >= 0.5 then:
484:         return 'normal'
485:     else if row['N_CAN_ID_153'] >= 0.5 and row['P_CAN_ID_53F'] >= 0.5 then:
486:         return 'normal'
487:     else if row['N_CAN_ID_38D'] >= 0.5 and row['P_CAN_ID_140'] >= 0.5 then:
488:         return 'normal'
489:     else if row['D2'] >= 108.5 and row['D3'] < 0.5 and row['D4'] < 0.5 then:
490:         return 'normal'
491:     else if row['D2'] >= 108.5 and row['P_CAN_ID_153'] >= 0.5 and row['D7'] >= 70.5 then:
492:         return 'normal'
493:     else if row['D2'] >= 108.5 and row['P_CAN_ID_153'] >= 0.5 and row['N_CAN_ID_329'] >= 0.5 then:
494:         return 'normal'
495:     else if row['D2'] >= 108.5 and row['D0'] >= 7.5 and row['N_CAN_ID_153'] >= 0.5 then:
496:         return 'normal'
497:     else if row['P_CAN_ID_153'] >= 0.5 and row['D4'] < 0.5 and row['D6'] >= 13.5 then:
498:         return 'normal'
499:     else if row['D4'] < 0.5 and row['D6'] >= 13.5 and row['N_CAN_ID_153'] >= 0.5 then:
500:         return 'normal'
501:     else if row['D4'] < 1.5 and row['N_CAN_ID_153'] >= 0.5 and row['D4'] >= 0.5 then:
502:         return 'normal'
503:     else
504:         return 'attack'
505: else if row['Arbitration_ID'] == 251' then:

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506: if row['N_CAN_ID_2B0'] >= 0.5 and row['P_CAN_ID_164'] >= 0.5 then:
507:     return 'normal'
508: else if row['N_CAN_ID_2B0'] >= 0.5 and row['D1'] < 5.5 then:
509:     return 'normal'
510: else if row['P_CAN_ID_164'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
511:     return 'normal'
512: else if row['D7'] >= 112.5 and row['P_CAN_ID_593'] >= 0.5 then:
513:     return 'normal'
514: else if row['D6'] >= 37.5 and row['P_CAN_ID_381'] >= 0.5 then:
515:     return 'normal'
516: else if row['D7'] >= 112.5 and row['D6'] >= 37.5 and row['P_CAN_ID_492'] >= 0.5 then:
517:     return 'normal'
518: else if row['D7'] >= 112.5 and row['D0'] >= 64.5 and row['P_CAN_ID_53E'] >= 0.5 then:
519:     return 'normal'
520: else if row['D7'] >= 112.5 and row['D2'] >= 28.5 and row['N_CAN_ID_164'] >= 0.5 then:
521:     return 'normal'
522: else if row['D1'] < 5.5 and row['D1'] >= 1.5 and row['N_CAN_ID_164'] >= 0.5 then:
523:     return 'normal'
524: else if row['D7'] >= 112.5 and row['P_CAN_ID_366'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
525:     return 'normal'
526: else if row['D1'] < 5.5 and row['D0'] >= 74.5 and row['N_CAN_ID_130'] >= 0.5 then:
527:     return 'normal'
528: else if row['D1'] < 5.5 and row['D2'] >= 30.5 and row['P_CAN_ID_356'] >= 0.5 then:
529:     return 'normal'
530: else
531:     return 'attack'
532: else if row['Arbitration_ID'] == 260 then:
533:     if row['D5'] >= 188.5 and row['P_CAN_ID_479'] >= 0.5 then:
534:         return 'normal'
535:     else if row['D5'] >= 188.5 and row['P_CAN_ID_572'] >= 0.5 then:
536:         return 'normal'
537:     else if row['D5'] >= 188.5 and row['P_CAN_ID_5A6'] >= 0.5 then:
538:         return 'normal'
539:     else if row['D5'] >= 188.5 and row['P_CAN_ID_436'] >= 0.5 then:
540:         return 'normal'
541:     else if row['D5'] >= 188.5 and row['P_CAN_ID_520'] >= 0.5 then:
542:         return 'normal'
543:     else if row['D5'] >= 188.5 and row['P_CAN_ID_453'] >= 0.5 then:
544:         return 'normal'
545:     else if row['D5'] >= 188.5 and row['P_CAN_ID_553'] >= 0.5 then:
546:         return 'normal'
547:     else if row['D5'] >= 188.5 and row['P_CAN_ID_410'] >= 0.5 then:
548:         return 'normal'
549:     else if row['D5'] >= 188.5 and row['P_CAN_ID_490'] >= 0.5 then:
550:         return 'normal'
551:     else if row['D6'] >= 70.5 and row['N_CAN_ID_58B'] >= 0.5 then:
552:         return 'normal'
553:     else if row['N_CAN_ID_329'] >= 0.5 and row['P_CAN_ID_541'] >= 0.5 then:
554:         return 'normal'
555:     else if row['N_CAN_ID_329'] >= 0.5 and row['P_CAN_ID_53F'] >= 0.5 then:
556:         return 'normal'
557:     else if row['N_CAN_ID_329'] >= 0.5 and row['P_CAN_ID_559'] >= 0.5 then:
558:         return 'normal'
559:     else if row['D5'] >= 188.5 and row['D6'] >= 70.5 and row['P_CAN_ID_470'] >= 0.5 then:
560:         return 'normal'
561:     else if row['D5'] >= 188.5 and row['D6'] >= 70.5 and row['N_CAN_ID_153'] >= 0.5 then:
562:         return 'normal'
563:     else if row['D5'] >= 188.5 and row['D6'] >= 70.5 and row['P_CAN_ID_153'] >= 0.5 then:
564:         return 'normal'
565:     else if row['D5'] >= 188.5 and row['D6'] >= 70.5 and row['P_CAN_ID_58B'] >= 0.5 then:
566:         return 'normal'
567:     else if row['D5'] >= 188.5 and row['D6'] >= 70.5 and row['P_CAN_ID_485'] >= 0.5 then:
568:         return 'normal'
569:     else if row['D5'] >= 188.5 and row['D6'] >= 70.5 and row['N_CAN_ID_568'] >= 0.5 then:
570:         return 'normal'
571:     else if row['D5'] >= 188.5 and row['D0'] < 9.5 and row['P_CAN_ID_541'] >= 0.5 then:
572:         return 'normal'
573:     else if row['D5'] >= 188.5 and row['D0'] < 9.5 and row['P_CAN_ID_53F'] >= 0.5 then:
574:         return 'normal'
575:     else if row['D5'] >= 188.5 and row['D0'] < 9.5 and row['P_CAN_ID_559'] >= 0.5 then:
576:         return 'normal'
577:     else if row['D5'] >= 188.5 and row['D0'] < 9.5 and row['P_CAN_ID_48A'] >= 0.5 then:
578:         return 'normal'
579:     else if row['D5'] >= 188.5 and row['D0'] < 9.5 and row['P_CAN_ID_484'] >= 0.5 then:
580:         return 'normal'
581:     else if row['D5'] >= 188.5 and row['D0'] < 9.5 and row['P_CAN_ID_593'] >= 0.5 then:
582:         return 'normal'
583:     else if row['D5'] >= 188.5 and row['D0'] < 9.5 and row['P_CAN_ID_500'] >= 0.5 then:
584:         return 'normal'
585:     else if row['D5'] >= 188.5 and row['N_CAN_ID_329'] >= 0.5 and row['P_CAN_ID_4F1'] >= 0.5 then:
586:         return 'normal'
587:     else if row['D5'] >= 188.5 and row['N_CAN_ID_47F'] >= 0.5 and row['P_CAN_ID_140'] >= 0.5 then:
588:         return 'normal'
589:     else if row['D5'] >= 188.5 and row['N_CAN_ID_47F'] >= 0.5 and row['P_CAN_ID_4F1'] >= 0.5 then:
590:         return 'normal'

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591:   else if row['D5'] >= 188.5 and row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
592:       return 'normal'
593:   else if row['D6'] >= 70.5 and row['D0'] < 9.5 and row['N_CAN_ID_48A'] >= 0.5 then:
594:       return 'normal'
595:   else if row['D6'] >= 70.5 and row['D0'] < 9.5 and row['P_CAN_ID_53E'] >= 0.5 then:
596:       return 'normal'
597:   else if row['D3'] >= 47.5 and row['D0'] < 9.5 and row['N_CAN_ID_47F'] >= 0.5 then:
598:       return 'normal'
599:   else if row['D5'] >= 188.5 and row['N_CAN_ID_329'] >= 0.5 then:
600:       return 'normal'
601:   else if row['D5'] >= 188.5 and row['N_CAN_ID_470'] >= 0.5 then:
602:       return 'normal'
603:   else if row['D5'] >= 188.5 and row['D6'] >= 70.5 and row['D0'] < 9.5 then:
604:       return 'normal'
605:   else
606:       return 'attack'
607:   else if row['Arbitration_ID'] == 553 then:
608:       if row['P_CAN_ID_544'] >= 0.5 then:
609:           return 'normal'
610:       else if row['TimePeriod'] >= 0.16935253143310547 and row['D6'] >= 127.5 then:
611:           return 'normal'
612:       else
613:           return 'attack'
614:   else if row['Arbitration_ID'] == 559 then:
615:       if row['TimePeriod'] >= 0.1591969728469848 and row['P_CAN_ID_389'] >= 0.5 then:
616:           return 'normal'
617:       else if row['TimePeriod'] >= 0.1591969728469848 and row['TimeInterval'] >= 0.00025045871734615 and row['P_CAN_ID_470'] >= 0.5 then:
618:           return 'normal'
619:       else if row['TimePeriod'] >= 0.1591969728469848 and row['TimeInterval'] >= 0.00025045871734615 then:
620:           return 'normal'
621:       else
622:           return 'attack'
623:   else if row['Arbitration_ID'] == 544 then:
624:       if row['D0'] >= 254.5 and row['D2'] >= 254.5 then:
625:           return 'normal'
626:       else
627:           return 'attack'
628:   else if row['Arbitration_ID'] == 541 then:
629:       if row['TimePeriod'] >= 0.09773051738739011 and row['P_CAN_ID_500'] >= 0.5 then:
630:           return 'normal'
631:       else if row['TimePeriod'] >= 0.09773051738739011 and row['D4'] >= 191.5 and row['D5'] < 0.5 then:
632:           return 'normal'
633:       else
634:           return 'attack'
635:   else if row['Arbitration_ID'] == 520 then:
636:       if row['TimePeriod'] >= 0.0985629558563232 and row['P_CAN_ID_44E'] >= 0.5 then:
637:           return 'normal'
638:       else if row['TimeInterval'] >= 0.00025045871734615 and row['N_CAN_ID_572'] >= 0.5 then:
639:           return 'normal'
640:       else if row['TimePeriod'] >= 0.0985629558563232 and row['TimeInterval'] >= 0.00025045871734615 and row['P_CAN_ID_368'] >= 0.5 then:
641:           return 'normal'
642:       else if row['TimePeriod'] >= 0.0985629558563232 and row['N_CAN_ID_260'] >= 0.5 and row['P_CAN_ID_356'] >= 0.5 then:
643:           return 'normal'
644:       else if row['TimePeriod'] >= 0.0985629558563232 and row['P_CAN_ID_386'] >= 0.5 and row['N_CAN_ID_340'] >= 0.5 then:
645:           return 'normal'
646:       else if row['D0'] < 0.5 and row['N_CAN_ID_260'] >= 0.5 and row['P_CAN_ID_386'] >= 0.5 then:
647:           return 'normal'
648:       else if row['TimePeriod'] >= 0.0985629558563232 and row['TimeInterval'] >= 0.00025045871734615 then:
649:           return 'normal'
650:       else
651:           return 'attack'
652:   else if row['Arbitration_ID'] == 507 then:
653:       if row['TimeInterval'] < 0.00017952919006340002 and row['P_CAN_ID_153'] >= 0.5 then:
654:           return 'normal'
655:       else if row['TimeInterval'] < 0.00017952919006340002 and row['P_CAN_ID_220'] >= 0.5 then:
656:           return 'normal'
657:       else if row['TimeInterval'] < 0.00017952919006340002 and row['P_CAN_ID_500'] >= 0.5 then:
658:           return 'normal'
659:       else if row['TimeInterval'] < 0.00017952919006340002 and row['TimePeriod'] >= 0.0992743968963623 and row['D0'] < 0.5 then:
660:           return 'normal'
661:       else if row['DLC'] < 4.5 and row['P_CAN_ID_153'] >= 0.5 then:
662:           return 'normal'
663:       else if row['P_CAN_ID_220'] >= 0.5 and row['N_CAN_ID_490'] >= 0.5 then:
664:           return 'normal'
665:       else if row['N_CAN_ID_490'] >= 0.5 and row['P_CAN_ID_500'] >= 0.5 then:
666:           return 'normal'
667:       else if row['DLC'] < 4.5 and row['TimePeriod'] >= 0.0992743968963623 and row['D0'] < 0.5 then:
668:           return 'normal'
669:       else
670:           return 'attack'
671:   else if row['Arbitration_ID'] == 500 then:
672:       if row['TimePeriod'] >= 0.09718692302703855 and row['N_CAN_ID_541'] >= 0.5 then:
673:           return 'normal'
674:       else if row['TimePeriod'] >= 0.09718692302703855 and row['N_CAN_ID_507'] >= 0.5 then:
675:           return 'normal'

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676:   else if row['P_CAN_ID_495'] >= 0.5 and row['N_CAN_ID_164'] >= 0.5 then:
677:       return 'normal'
678:   else if row['P_CAN_ID_495'] >= 0.5 and row['N_CAN_ID_38D'] >= 0.5 then:
679:       return 'normal'
680:   else if row['P_CAN_ID_495'] >= 0.5 and row['N_CAN_ID_394'] >= 0.5 then:
681:       return 'normal'
682:   else if row['P_CAN_ID_495'] >= 0.5 and row['N_CAN_ID_356'] >= 0.5 then:
683:       return 'normal'
684:   else if row['TimePeriod'] >= 0.09718692302703855 and row['TimeInterval'] >= 0.00024354457855214998 and row['D7'] >= 77.5 then:
685:       return 'normal'
686:   else if row['TimePeriod'] >= 0.09718692302703855 and row['P_CAN_ID_495'] >= 0.5 then:
687:       return 'normal'
688:   else if row['TimePeriod'] >= 0.09718692302703855 and row['N_CAN_ID_50C'] >= 0.5 then:
689:       return 'normal'
690:   else if row['D4'] >= 11.5 and row['N_CAN_ID_53F'] >= 0.5 then:
691:       return 'normal'
692:   else if row['TimePeriod'] >= 0.09718692302703855 and row['D3'] < 0.5 and row['D4'] >= 11.5 then:
693:       return 'normal'
694:   else
695:       return 'attack'
696:   else if row['Arbitration_ID'] == 495' then:
697:       if row['D7'] >= 109.5 and row['P_CAN_ID_490'] >= 0.5 then:
698:           return 'normal'
699:       else if row['N_CAN_ID_500'] >= 0.5 and row['P_CAN_ID_140'] >= 0.5 then:
700:           return 'normal'
701:       else if row['N_CAN_ID_500'] >= 0.5 and row['P_CAN_ID_470'] >= 0.5 then:
702:           return 'normal'
703:       else if row['TimePeriod'] >= 0.09949851036071775 and row['D6'] >= 134.5 and row['D2'] >= 96.5 then:
704:           return 'normal'
705:       else
706:           return 'attack'
707:   else if row['Arbitration_ID'] == 492' then:
708:       if row['D1'] >= 253.5 and row['D5'] < 0.5 then:
709:           return 'normal'
710:       else
711:           return 'attack'
712:   else if row['Arbitration_ID'] == 490' then:
713:       if row['TimePeriod'] >= 0.0433235168457031 and row['P_CAN_ID_507'] >= 0.5 then:
714:           return 'normal'
715:       else if row['D6'] >= 59.5 and row['N_CAN_ID_49F'] >= 0.5 then:
716:           return 'normal'
717:       else if row['D4'] < 0.5 and row['N_CAN_ID_4A9'] >= 0.5 then:
718:           return 'normal'
719:       else if row['TimePeriod'] >= 0.0433235168457031 and row['D6'] >= 59.5 and row['D5'] >= 47.5 then:
720:           return 'normal'
721:       else if row['TimePeriod'] >= 0.0433235168457031 and row['D6'] >= 59.5 and row['P_CAN_ID_4F1'] >= 0.5 then:
722:           return 'normal'
723:       else if row['TimePeriod'] >= 0.0433235168457031 and row['D6'] >= 59.5 and row['N_CAN_ID_164'] >= 0.5 then:
724:           return 'normal'
725:       else if row['TimePeriod'] >= 0.0433235168457031 and row['D6'] >= 59.5 and row['D2'] < 8.5 then:
726:           return 'normal'
727:       else
728:           return 'attack'
729:   else if row['Arbitration_ID'] == 485' then:
730:       if row['TimeInterval'] < 0.00017952919006340002 and row['N_CAN_ID_4C9'] >= 0.5 then:
731:           return 'normal'
732:       else if row['P_CAN_ID_340'] >= 0.5 and row['N_CAN_ID_492'] >= 0.5 then:
733:           return 'normal'
734:       else if row['N_CAN_ID_48A'] >= 0.5 and row['P_CAN_ID_484'] >= 0.5 then:
735:           return 'normal'
736:       else if row['TimeInterval'] < 0.00017952919006340002 and row['D1'] < 0.5 and row['N_CAN_ID_48A'] >= 0.5 then:
737:           return 'normal'
738:       else if row['TimeInterval'] < 0.00017952919006340002 and row['D1'] < 0.5 and row['N_CAN_ID_492'] >= 0.5 then:
739:           return 'normal'
740:       else if row['TimeInterval'] < 0.00017952919006340002 and row['D1'] < 0.5 and row['N_CAN_ID_394'] >= 0.5 then:
741:           return 'normal'
742:       else if row['TimeInterval'] < 0.00017952919006340002 and row['D1'] < 0.5 and row['N_CAN_ID_381'] >= 0.5 then:
743:           return 'normal'
744:       else if row['TimeInterval'] < 0.00017952919006340002 and row['D3'] < 0.5 and row['N_CAN_ID_164'] >= 0.5 then:
745:           return 'normal'
746:       else if row['TimeInterval'] < 0.00017952919006340002 and row['D3'] < 0.5 and row['P_CAN_ID_386'] >= 0.5 then:
747:           return 'normal'
748:       else if row['TimeInterval'] < 0.00017952919006340002 and row['D3'] < 0.5 and row['N_CAN_ID_47F'] >= 0.5 then:
749:           return 'normal'
750:       else if row['TimeInterval'] < 0.00017952919006340002 and row['P_CAN_ID_340'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
751:           return 'normal'
752:       else if row['TimeInterval'] < 0.00017952919006340002 and row['P_CAN_ID_340'] >= 0.5 and row['N_CAN_ID_260'] >= 0.5 then:
753:           return 'normal'
754:       else if row['DLC'] < 4.5 and row['D3'] < 0.5 and row['P_CAN_ID_389'] >= 0.5 then:
755:           return 'normal'
756:       else if row['DLC'] < 4.5 and row['D3'] < 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
757:           return 'normal'
758:       else if row['DLC'] < 4.5 and row['D3'] < 0.5 and row['P_CAN_ID_391'] >= 0.5 then:
759:           return 'normal'
760:       else if row['TimeInterval'] < 0.00017952919006340002 and row['P_CAN_ID_484'] >= 0.5 then:

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761:     return 'normal'
762: else if row['TimeInterval'] < 0.00017952919006340002 and row['N_CAN_ID_58B'] >= 0.5 then:
763:     return 'normal'
764: else if row['P_CAN_ID_340'] >= 0.5 and row['N_CAN_ID_48C'] >= 0.5 then:
765:     return 'normal'
766: else if row['TimeInterval'] < 0.00017952919006340002 and row['D1'] < 0.5 and row['P_CAN_ID_340'] >= 0.5 then:
767:     return 'normal'
768: else if row['TimeInterval'] < 0.00017952919006340002 and row['D1'] < 0.5 and row['P_CAN_ID_470'] >= 0.5 then:
769:     return 'normal'
770: else if row['TimeInterval'] < 0.00017952919006340002 and row['D3'] < 0.5 and row['N_CAN_ID_4F1'] >= 0.5 then:
771:     return 'normal'
772: else if row['TimeInterval'] < 0.00017952919006340002 and row['D0'] < 2.5 and row['P_CAN_ID_47F'] >= 0.5 then:
773:     return 'normal'
774: else if row['TimeInterval'] < 0.00017952919006340002 and row['D0'] < 2.5 and row['N_CAN_ID_568'] >= 0.5 then:
775:     return 'normal'
776: else if row['D0'] < 2.5 and row['N_CAN_ID_593'] >= 0.5 and row['P_CAN_ID_42D'] < 0.5 then:
777:     return 'normal'
778: else
779:     return 'attack'
780: else if row['Arbitration_ID'] == 484 then:
781:     if row['D6'] >= 251.5 and row['TimePeriod'] >= 0.06026351451873775 then:
782:         return 'normal'
783:     else if row['TimePeriod'] >= 0.06026351451873775 and row['N_CAN_ID_485'] >= 0.5 then:
784:         return 'normal'
785:     else if row['TimePeriod'] >= 0.06026351451873775 and row['N_CAN_ID_50A'] >= 0.5 then:
786:         return 'normal'
787:     else if row['P_CAN_ID_340'] >= 0.5 and row['N_CAN_ID_490'] >= 0.5 then:
788:         return 'normal'
789:     else if row['TimePeriod'] >= 0.06026351451873775 and row['D1'] < 1.5 and row['N_CAN_ID_381'] >= 0.5 then:
790:         return 'normal'
791:     else if row['TimePeriod'] >= 0.06026351451873775 and row['D1'] < 1.5 and row['P_CAN_ID_436'] >= 0.5 then:
792:         return 'normal'
793:     else if row['TimePeriod'] >= 0.06026351451873775 and row['D2'] >= 73.5 and row['P_CAN_ID_42D'] >= 0.5 then:
794:         return 'normal'
795:     else if row['TimePeriod'] >= 0.06026351451873775 and row['D2'] >= 73.5 and row['N_CAN_ID_47F'] >= 0.5 then:
796:         return 'normal'
797:     else if row['TimePeriod'] >= 0.06026351451873775 and row['D7'] >= 61.5 and row['D3'] >= 45.5 then:
798:         return 'normal'
799:     else if row['TimePeriod'] >= 0.06026351451873775 and row['D1'] < 1.5 and row['N_CAN_ID_541'] >= 0.5 then:
800:         return 'normal'
801:     else if row['TimePeriod'] >= 0.06026351451873775 and row['D5'] < 0.5 and row['N_CAN_ID_479'] >= 0.5 then:
802:         return 'normal'
803:     else if row['D7'] >= 61.5 and row['D5'] < 0.5 and row['N_CAN_ID_49F'] >= 0.5 then:
804:         return 'normal'
805:     else
806:         return 'attack'
807: else if row['Arbitration_ID'] == 483 then:
808:     if row['TimePeriod'] >= 0.19882953166961664 and row['N_CAN_ID_4A2'] >= 0.5 then:
809:         return 'normal'
810:     else if row['D1'] < 0.5 and row['D0'] >= 18.5 and row['P_CAN_ID_470'] >= 0.5 then:
811:         return 'normal'
812:     else if row['D3'] < 0.5 and row['P_CAN_ID_38D'] >= 0.5 and row['D0'] >= 18.5 then:
813:         return 'normal'
814:     else if row['TimePeriod'] >= 0.19882953166961664 and row['N_CAN_ID_420'] >= 0.5 and row['P_CAN_ID_340'] >= 0.5 then:
815:         return 'normal'
816:     else if row['TimeInterval'] >= 0.00024688243865964997 and row['N_CAN_ID_420'] >= 0.5 and row['D4'] < 0.5 then:
817:         return 'normal'
818:     else
819:         return 'attack'
820: else if row['Arbitration_ID'] == 563 then:
821:     if row['TimePeriod'] >= 0.5492360591888428 and row['D0'] >= 191.0 then:
822:         return 'normal'
823:     else if row['D0'] >= 191.0 and row['N_CAN_ID_568'] >= 0.5 then:
824:         return 'normal'
825:     else if row['D0'] >= 191.0 and row['P_CAN_ID_50E'] >= 0.5 then:
826:         return 'normal'
827:     else if row['D0'] >= 191.0 and row['D3'] < 0.5 and row['D1'] < 3.5 then:
828:         return 'normal'
829:     else
830:         return 'attack'
831: else if row['Arbitration_ID'] == 568 then:
832:     if row['P_CAN_ID_563'] >= 0.5 then:
833:         return 'normal'
834:     else if row['N_CAN_ID_57F'] >= 0.5 then:
835:         return 'normal'
836:     else if row['D3'] >= 129.5 and row['N_CAN_ID_48A'] >= 0.5 then:
837:         return 'normal'
838:     else if row['TimePeriod'] >= 0.08358991146087641 and row['D4'] >= 127.5 and row['D2'] < 0.5 then:
839:         return 'normal'
840:     else
841:         return 'attack'
842: else if row['Arbitration_ID'] == 572 then:
843:     if row['TimePeriod'] >= 0.19910252094268793 and row['P_CAN_ID_49F'] >= 0.5 then:
844:         return 'normal'
845:     else if row['D1'] < 0.5 and row['P_CAN_ID_520'] >= 0.5 then:

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846:     return 'normal'
847: else if row['TimePeriod'] >= 0.19910252094268793 and row['TimeInterval'] >= 0.00024855136871335 then:
848:     return 'normal'
849: else
850:     return 'attack'
851: else if row['Arbitration_ID'] == 593 then:
852:     if row['D2'] >= 254.0 and row['D5'] >= 253.5 then:
853:         return 'normal'
854:     else
855:         return 'attack'
856: else if row['Arbitration_ID'] == 410 then:
857:     if row['TimePeriod'] >= 0.19927442073822016 and row['N_CAN_ID_436'] >= 0.5 then:
858:         return 'normal'
859:     else if row['TimePeriod'] >= 0.19927442073822016 and row['P_CAN_ID_436'] >= 0.5 then:
860:         return 'normal'
861:     else if row['TimePeriod'] >= 0.19927442073822016 and row['D0'] >= 95.5 and row['P_CAN_ID_386'] >= 0.5 then:
862:         return 'normal'
863:     else if row['TimePeriod'] >= 0.19927442073822016 and row['D0'] >= 95.5 and row['N_CAN_ID_340'] >= 0.5 then:
864:         return 'normal'
865:     else if row['TimeInterval'] >= 0.00024449825286865 and row['D1'] >= 17.5 and row['D1'] < 18.5 then:
866:         return 'normal'
867:     else
868:         return 'attack'
869: else if row['Arbitration_ID'] == 479 then:
870:     if row['TimePeriod'] >= 0.09952199459075925 and row['D0'] >= 73.5 and row['D0'] < 74.5 then:
871:         return 'normal'
872:     else if row['TimePeriod'] >= 0.09930396080017084 and row['N_CAN_ID_260'] >= 0.5 and row['P_CAN_ID_386'] >= 0.5 then:
873:         return 'normal'
874:     else if row['TimePeriod'] >= 0.09930396080017084 and row['P_CAN_ID_368'] >= 0.5 then:
875:         return 'normal'
876:     else if row['D3'] < 0.5 and row['N_CAN_ID_500'] >= 0.5 then:
877:         return 'normal'
878:     else if row['N_CAN_ID_260'] >= 0.5 and row['P_CAN_ID_356'] >= 0.5 then:
879:         return 'normal'
880:     else if row['P_CAN_ID_386'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
881:         return 'normal'
882:     else if row['P_CAN_ID_386'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
883:         return 'normal'
884:     else if row['TimePeriod'] >= 0.09930396080017084 and row['D3'] < 0.5 and row['P_CAN_ID_391'] >= 0.5 then:
885:         return 'normal'
886:     else if row['TimePeriod'] >= 0.09930396080017084 and row['P_CAN_ID_386'] >= 0.5 and row['N_CAN_ID_340'] >= 0.5 then:
887:         return 'normal'
888:     else if row['D3'] < 0.5 and row['N_CAN_ID_130'] >= 0.5 and row['P_CAN_ID_356'] >= 0.5 then:
889:         return 'normal'
890:     else if row['D6'] < 0.5 and row['N_CAN_ID_340'] >= 0.5 and row['P_CAN_ID_356'] >= 0.5 then:
891:         return 'normal'
892:     else
893:         return 'attack'
894: else if row['Arbitration_ID'] == 421 then:
895:     if row['D0'] >= 253.5 and row['P_CAN_ID_420'] >= 0.5 then:
896:         return 'normal'
897:     else if row['D0'] >= 253.5 and row['N_CAN_ID_389'] >= 0.5 then:
898:         return 'normal'
899:     else if row['D0'] >= 253.5 and row['P_CAN_ID_340'] >= 0.5 then:
900:         return 'normal'
901:     else if row['D3'] >= 254.5 and row['D2'] < 0.5 then:
902:         return 'normal'
903:     else
904:         return 'attack'
905: else if row['Arbitration_ID'] == 420 then:
906:     if row['D4'] >= 251.5 and row['P_CAN_ID_4A2'] >= 0.5 then:
907:         return 'normal'
908:     else if row['N_CAN_ID_421'] >= 0.5 and row['P_CAN_ID_38D'] >= 0.5 then:
909:         return 'normal'
910:     else if row['N_CAN_ID_421'] >= 0.5 and row['P_CAN_ID_483'] >= 0.5 then:
911:         return 'normal'
912:     else if row['N_CAN_ID_421'] >= 0.5 and row['P_CAN_ID_412'] >= 0.5 then:
913:         return 'normal'
914:     else if row['D0'] >= 47.5 and row['P_CAN_ID_483'] >= 0.5 then:
915:         return 'normal'
916:     else if row['D4'] >= 251.5 and row['D3'] >= 199.5 and row['D6'] >= 104.5 then:
917:         return 'normal'
918:     else if row['D3'] >= 199.5 and row['N_CAN_ID_421'] >= 0.5 then:
919:         return 'normal'
920:     else if row['D3'] >= 199.5 and row['D6'] >= 104.5 and row['D3'] < 200.5 then:
921:         return 'normal'
922:     else
923:         return 'attack'
924: else if row['Arbitration_ID'] == 436 then:
925:     if row['TimeInterval'] < 0.00017940998077385 and row['N_CAN_ID_453'] >= 0.5 then:
926:         return 'normal'
927:     else if row['TimeInterval'] < 0.00017940998077385 and row['P_CAN_ID_410'] >= 0.5 then:
928:         return 'normal'
929:     else if row['TimeInterval'] < 0.00017940998077385 and row['N_CAN_ID_410'] >= 0.5 then:
930:         return 'normal'

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931:   else if row['TimeInterval'] < 0.00017940998077385 and row['P_CAN_ID_453'] >= 0.5 then:
932:       return 'normal'
933:   else if row['TimeInterval'] < 0.00017940998077385 and row['D1'] < 0.5 and row['P_CAN_ID_394'] >= 0.5 then:
934:       return 'normal'
935:   else if row['TimeInterval'] < 0.00017940998077385 and row['D1'] < 0.5 and row['P_CAN_ID_368'] >= 0.5 then:
936:       return 'normal'
937:   else if row['TimeInterval'] < 0.00017940998077385 and row['D0'] < 0.5 and row['N_CAN_ID_4F1'] >= 0.5 then:
938:       return 'normal'
939:   else if row['TimeInterval'] < 0.00017940998077385 and row['P_CAN_ID_386'] >= 0.5 and row['N_CAN_ID_260'] >= 0.5 then:
940:       return 'normal'
941:   else if row['TimeInterval'] < 0.00017940998077385 and row['P_CAN_ID_386'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
942:       return 'normal'
943:   else if row['DLC'] < 4.5 and row['P_CAN_ID_386'] >= 0.5 and row['N_CAN_ID_340'] >= 0.5 then:
944:       return 'normal'
945:   else if row['TimeInterval'] < 0.00017940998077385 and row['D1'] < 0.5 and row['N_CAN_ID_260'] >= 0.5 then:
946:       return 'normal'
947:   else if row['TimeInterval'] < 0.00017940998077385 and row['D0'] < 0.5 and row['P_CAN_ID_386'] >= 0.5 then:
948:       return 'normal'
949:   else if row['D2'] < 0.5 and row['D0'] < 0.5 and row['N_CAN_ID_541'] >= 0.5 then:
950:       return 'normal'
951:   else
952:       return 'attack'
953:   else if row['Arbitration_ID'] == 453 then:
954:       if row['TimeInterval'] < 0.00018763542175289998 and row['D2'] >= 141.5 then:
955:           return 'normal'
956:       else if row['TimeInterval'] < 0.00018703937530515 and row['D2'] >= 142.5 then:
957:           return 'normal'
958:       else if row['DLC'] < 5.5 and row['D1'] >= 135.5 then:
959:           return 'normal'
960:       else
961:           return 'attack'
962:   else if row['Arbitration_ID'] == 329 then:
963:       if row['P_CAN_ID_260'] >= 0.5 and row['N_CAN_ID_492'] >= 0.5 then:
964:           return 'normal'
965:       else if row['P_CAN_ID_260'] >= 0.5 and row['N_CAN_ID_356'] >= 0.5 then:
966:           return 'normal'
967:       else if row['D1'] >= 197.5 and row['N_CAN_ID_490'] >= 0.5 then:
968:           return 'normal'
969:       else if row['D1'] >= 197.5 and row['P_CAN_ID_507'] >= 0.5 then:
970:           return 'normal'
971:       else if row['P_CAN_ID_220'] >= 0.5 and row['N_CAN_ID_356'] >= 0.5 then:
972:           return 'normal'
973:       else if row['D3'] >= 139.5 and row['D0'] >= 73.5 and row['P_CAN_ID_58B'] >= 0.5 then:
974:           return 'normal'
975:       else if row['D3'] >= 139.5 and row['D0'] >= 73.5 and row['P_CAN_ID_4F1'] >= 0.5 then:
976:           return 'normal'
977:       else if row['D3'] >= 139.5 and row['D7'] < 16.5 and row['P_CAN_ID_507'] >= 0.5 then:
978:           return 'normal'
979:       else if row['D3'] >= 139.5 and row['P_CAN_ID_260'] >= 0.5 and row['N_CAN_ID_38D'] >= 0.5 then:
980:           return 'normal'
981:       else if row['D3'] >= 139.5 and row['P_CAN_ID_260'] >= 0.5 and row['N_CAN_ID_164'] >= 0.5 then:
982:           return 'normal'
983:       else if row['D3'] >= 139.5 and row['D1'] >= 197.5 and row['P_CAN_ID_47F'] >= 0.5 then:
984:           return 'normal'
985:       else if row['D3'] >= 139.5 and row['D1'] >= 197.5 and row['N_CAN_ID_164'] >= 0.5 then:
986:           return 'normal'
987:       else if row['D3'] >= 139.5 and row['P_CAN_ID_220'] >= 0.5 and row['N_CAN_ID_490'] >= 0.5 then:
988:           return 'normal'
989:       else if row['D3'] >= 139.5 and row['N_CAN_ID_356'] >= 0.5 and row['P_CAN_ID_47F'] >= 0.5 then:
990:           return 'normal'
991:       else if row['D0'] >= 73.5 and row['P_CAN_ID_260'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
992:           return 'normal'
993:       else if row['D0'] >= 73.5 and row['D1'] >= 197.5 and row['N_CAN_ID_220'] >= 0.5 then:
994:           return 'normal'
995:       else if row['D0'] >= 73.5 and row['D1'] >= 197.5 and row['P_CAN_ID_220'] >= 0.5 then:
996:           return 'normal'
997:       else if row['D0'] >= 73.5 and row['N_CAN_ID_47F'] >= 0.5 and row['P_CAN_ID_220'] >= 0.5 then:
998:           return 'normal'
999:       else if row['D0'] >= 73.5 and row['N_CAN_ID_220'] >= 0.5 and row['P_CAN_ID_140'] >= 0.5 then:
1000:           return 'normal'
1001:       else if row['D0'] >= 73.5 and row['P_CAN_ID_220'] >= 0.5 and row['N_CAN_ID_492'] >= 0.5 then:
1002:           return 'normal'
1003:       else if row['D5'] >= 41.5 and row['P_CAN_ID_260'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1004:           return 'normal'
1005:       else if row['D5'] >= 41.5 and row['P_CAN_ID_260'] >= 0.5 and row['N_CAN_ID_38D'] >= 0.5 then:
1006:           return 'normal'
1007:       else if row['D7'] < 16.5 and row['D7'] >= 15.5 and row['N_CAN_ID_220'] >= 0.5 then:
1008:           return 'normal'
1009:       else if row['D7'] < 16.5 and row['D7'] >= 15.5 and row['P_CAN_ID_58B'] >= 0.5 then:
1010:           return 'normal'
1011:       else if row['D7'] < 16.5 and row['D7'] >= 15.5 and row['N_CAN_ID_38D'] >= 0.5 then:
1012:           return 'normal'
1013:       else if row['D7'] < 16.5 and row['D7'] >= 15.5 and row['N_CAN_ID_490'] >= 0.5 then:
1014:           return 'normal'
1015:       else if row['D7'] < 16.5 and row['D7'] >= 15.5 and row['N_CAN_ID_58B'] >= 0.5 then:

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1016:     return 'normal'
1017: else if row['D7'] < 16.5 and row['D1'] >= 197.5 and row['N_CAN_ID_47F'] >= 0.5 then:
1018:     return 'normal'
1019: else if row['D7'] < 16.5 and row['N_CAN_ID_492'] >= 0.5 and row['P_CAN_ID_140'] >= 0.5 then:
1020:     return 'normal'
1021: else if row['D3'] >= 139.5 and row['N_CAN_ID_47F'] >= 0.5 then:
1022:     return 'normal'
1023: else if row['D3'] >= 139.5 and row['P_CAN_ID_153'] >= 0.5 then:
1024:     return 'normal'
1025: else if row['D7'] < 16.5 and row['D7'] >= 15.5 then:
1026:     return 'normal'
1027: else
1028:     return 'attack'
1029: else if row['Arbitration_ID'] == 470 then:
1030:     if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_541'] >= 0.5 then:
1031:         return 'normal'
1032:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_4F1'] >= 0.5 then:
1033:         return 'normal'
1034:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_48A'] >= 0.5 then:
1035:         return 'normal'
1036:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_490'] >= 0.5 then:
1037:         return 'normal'
1038:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_38D'] >= 0.5 then:
1039:         return 'normal'
1040:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_485'] >= 0.5 then:
1041:         return 'normal'
1042:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_544'] >= 0.5 then:
1043:         return 'normal'
1044:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_4A9'] >= 0.5 then:
1045:         return 'normal'
1046:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_484'] >= 0.5 then:
1047:         return 'normal'
1048:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_559'] >= 0.5 then:
1049:         return 'normal'
1050:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_495'] >= 0.5 then:
1051:         return 'normal'
1052:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_483'] >= 0.5 then:
1053:         return 'normal'
1054:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1055:         return 'normal'
1056:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_220'] >= 0.5 then:
1057:         return 'normal'
1058:     else if row['P_CAN_ID_453'] >= 0.5 and row['N_CAN_ID_50A'] >= 0.5 then:
1059:         return 'normal'
1060:     else if row['N_CAN_ID_541'] >= 0.5 and row['P_CAN_ID_436'] >= 0.5 then:
1061:         return 'normal'
1062:     else if row['N_CAN_ID_541'] >= 0.5 and row['P_CAN_ID_387'] >= 0.5 then:
1063:         return 'normal'
1064:     else if row['N_CAN_ID_544'] >= 0.5 and row['P_CAN_ID_366'] >= 0.5 then:
1065:         return 'normal'
1066:     else if row['P_CAN_ID_453'] >= 0.5 and row['D4'] >= 79.5 and row['D0'] >= 20.5 then:
1067:         return 'normal'
1068:     else if row['D4'] >= 79.5 and row['D3'] < 5.5 and row['N_CAN_ID_541'] >= 0.5 then:
1069:         return 'normal'
1070:     else if row['D4'] >= 79.5 and row['D0'] >= 20.5 and row['P_CAN_ID_436'] >= 0.5 then:
1071:         return 'normal'
1072:     else if row['D4'] >= 79.5 and row['D0'] >= 20.5 and row['P_CAN_ID_389'] >= 0.5 then:
1073:         return 'normal'
1074:     else if row['D6'] >= 83.5 and row['D1'] >= 64.5 and row['P_CAN_ID_366'] >= 0.5 then:
1075:         return 'normal'
1076:     else if row['D5'] >= 79.5 and row['D5'] < 81.5 and row['N_CAN_ID_4F1'] >= 0.5 then:
1077:         return 'normal'
1078:     else if row['D5'] >= 79.5 and row['D5'] < 81.5 and row['P_CAN_ID_260'] >= 0.5 then:
1079:         return 'normal'
1080:     else if row['D1'] >= 64.5 and row['N_CAN_ID_4A9'] >= 0.5 then:
1081:         return 'normal'
1082:     else if row['N_CAN_ID_544'] >= 0.5 and row['P_CAN_ID_140'] >= 0.5 then:
1083:         return 'normal'
1084:     else if row['P_CAN_ID_453'] >= 0.5 and row['D2'] < 5.5 and row['D1'] >= 64.5 then:
1085:         return 'normal'
1086:     else if row['D4'] >= 79.5 and row['D5'] < 81.5 and row['D5'] >= 79.5 then:
1087:         return 'normal'
1088:     else
1089:         return 'attack'
1090: else if row['Arbitration_ID'] == 340 then:
1091:     if row['D4'] >= 53.5 and row['P_CAN_ID_367'] >= 0.5 then:
1092:         return 'normal'
1093:     else if row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_42D'] >= 0.5 then:
1094:         return 'normal'
1095:     else if row['N_CAN_ID_485'] >= 0.5 and row['P_CAN_ID_492'] >= 0.5 then:
1096:         return 'normal'
1097:     else if row['N_CAN_ID_485'] >= 0.5 and row['P_CAN_ID_58B'] >= 0.5 then:
1098:         return 'normal'
1099:     else if row['P_CAN_ID_153'] >= 0.5 and row['N_CAN_ID_42D'] >= 0.5 then:
1100:         return 'normal'

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1101: else if row['N_CAN_ID_42D'] >= 0.5 and row['P_CAN_ID_593'] >= 0.5 then:
1102:     return 'normal'
1103: else if row['N_CAN_ID_42D'] >= 0.5 and row['P_CAN_ID_58B'] >= 0.5 then:
1104:     return 'normal'
1105: else if row['N_CAN_ID_484'] >= 0.5 and row['P_CAN_ID_507'] >= 0.5 then:
1106:     return 'normal'
1107: else if row['N_CAN_ID_368'] >= 0.5 and row['P_CAN_ID_367'] >= 0.5 then:
1108:     return 'normal'
1109: else if row['D1'] < 0.5 and row['D4'] >= 53.5 and row['N_CAN_ID_389'] >= 0.5 then:
1110:     return 'normal'
1111: else if row['D1'] < 0.5 and row['D4'] >= 53.5 and row['P_CAN_ID_421'] >= 0.5 then:
1112:     return 'normal'
1113: else if row['D1'] < 0.5 and row['D4'] >= 53.5 and row['N_CAN_ID_421'] >= 0.5 then:
1114:     return 'normal'
1115: else if row['D1'] < 0.5 and row['D4'] >= 53.5 and row['N_CAN_ID_485'] >= 0.5 then:
1116:     return 'normal'
1117: else if row['D1'] < 0.5 and row['D4'] >= 53.5 and row['N_CAN_ID_42D'] >= 0.5 then:
1118:     return 'normal'
1119: else if row['D1'] < 0.5 and row['D4'] >= 53.5 and row['N_CAN_ID_484'] >= 0.5 then:
1120:     return 'normal'
1121: else if row['D1'] < 0.5 and row['D4'] >= 53.5 and row['P_CAN_ID_507'] >= 0.5 then:
1122:     return 'normal'
1123: else if row['D1'] < 0.5 and row['D4'] >= 53.5 and row['N_CAN_ID_490'] >= 0.5 then:
1124:     return 'normal'
1125: else if row['D1'] < 0.5 and row['D4'] >= 53.5 and row['P_CAN_ID_479'] >= 0.5 then:
1126:     return 'normal'
1127: else if row['D1'] < 0.5 and row['D0'] < 0.5 and row['N_CAN_ID_389'] >= 0.5 then:
1128:     return 'normal'
1129: else if row['D1'] < 0.5 and row['D7'] >= 47.5 and row['P_CAN_ID_421'] >= 0.5 then:
1130:     return 'normal'
1131: else if row['D4'] >= 53.5 and row['D6'] >= 36.5 and row['N_CAN_ID_381'] >= 0.5 then:
1132:     return 'normal'
1133: else if row['D4'] >= 53.5 and row['D5'] < 1.5 and row['N_CAN_ID_47F'] >= 0.5 then:
1134:     return 'normal'
1135: else if row['D4'] >= 53.5 and row['D5'] < 1.5 and row['N_CAN_ID_420'] >= 0.5 then:
1136:     return 'normal'
1137: else if row['D6'] >= 36.5 and row['D5'] < 1.5 and row['P_CAN_ID_153'] >= 0.5 then:
1138:     return 'normal'
1139: else if row['D6'] >= 36.5 and row['P_CAN_ID_389'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
1140:     return 'normal'
1141: else if row['D2'] < 0.5 and row['P_CAN_ID_2B0'] >= 0.5 and row['N_CAN_ID_356'] >= 0.5 then:
1142:     return 'normal'
1143: else if row['D2'] < 0.5 and row['N_CAN_ID_164'] >= 0.5 and row['P_CAN_ID_220'] >= 0.5 then:
1144:     return 'normal'
1145: else if row['D0'] < 0.5 and row['P_CAN_ID_389'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1146:     return 'normal'
1147: else if row['D1'] < 0.5 and row['N_CAN_ID_421'] >= 0.5 then:
1148:     return 'normal'
1149: else if row['D1'] < 0.5 and row['N_CAN_ID_42D'] >= 0.5 then:
1150:     return 'normal'
1151: else if row['D2'] < 0.5 and row['P_CAN_ID_507'] >= 0.5 then:
1152:     return 'normal'
1153: else if row['D2'] < 0.5 and row['P_CAN_ID_593'] >= 0.5 then:
1154:     return 'normal'
1155: else if row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_485'] >= 0.5 then:
1156:     return 'normal'
1157: else if row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_484'] >= 0.5 then:
1158:     return 'normal'
1159: else if row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_490'] >= 0.5 then:
1160:     return 'normal'
1161: else if row['N_CAN_ID_47F'] >= 0.5 and row['P_CAN_ID_479'] >= 0.5 then:
1162:     return 'normal'
1163: else if row['D1'] < 0.5 and row['D4'] >= 53.5 and row['D5'] < 1.5 then:
1164:     return 'normal'
1165: else if row['D1'] < 0.5 and row['D6'] >= 36.5 and row['P_CAN_ID_479'] >= 0.5 then:
1166:     return 'normal'
1167: else if row['D1'] < 0.5 and row['D7'] >= 47.5 and row['P_CAN_ID_153'] >= 0.5 then:
1168:     return 'normal'
1169: else if row['D1'] < 0.5 and row['D7'] >= 47.5 and row['N_CAN_ID_47F'] >= 0.5 then:
1170:     return 'normal'
1171: else if row['D1'] < 0.5 and row['D7'] >= 47.5 and row['N_CAN_ID_490'] >= 0.5 then:
1172:     return 'normal'
1173: else if row['D1'] < 0.5 and row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_381'] >= 0.5 then:
1174:     return 'normal'
1175: else if row['D1'] < 0.5 and row['P_CAN_ID_389'] >= 0.5 and row['N_CAN_ID_485'] >= 0.5 then:
1176:     return 'normal'
1177: else if row['D1'] < 0.5 and row['P_CAN_ID_389'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
1178:     return 'normal'
1179: else if row['D1'] < 0.5 and row['P_CAN_ID_220'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1180:     return 'normal'
1181: else if row['D6'] >= 36.5 and row['D2'] < 0.5 and row['N_CAN_ID_356'] >= 0.5 then:
1182:     return 'normal'
1183: else if row['D6'] >= 36.5 and row['D5'] < 1.5 and row['P_CAN_ID_436'] >= 0.5 then:
1184:     return 'normal'
1185: else if row['D2'] < 0.5 and row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:

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1186:     return 'normal'
1187: else if row['D2'] < 0.5 and row['N_CAN_ID_130'] >= 0.5 and row['P_CAN_ID_220'] >= 0.5 then:
1188:     return 'normal'
1189: else if row['D7'] >= 47.5 and row['D5'] < 1.5 and row['N_CAN_ID_484'] >= 0.5 then:
1190:     return 'normal'
1191: else if row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_42D'] >= 0.5 then:
1192:     return 'normal'
1193: else if row['N_CAN_ID_485'] >= 0.5 and row['P_CAN_ID_492'] >= 0.5 then:
1194:     return 'normal'
1195: else if row['N_CAN_ID_485'] >= 0.5 and row['P_CAN_ID_58B'] >= 0.5 then:
1196:     return 'normal'
1197: else if row['P_CAN_ID_153'] >= 0.5 and row['N_CAN_ID_42D'] >= 0.5 then:
1198:     return 'normal'
1199: else if row['N_CAN_ID_42D'] >= 0.5 and row['P_CAN_ID_593'] >= 0.5 then:
1200:     return 'normal'
1201: else if row['N_CAN_ID_42D'] >= 0.5 and row['P_CAN_ID_58B'] >= 0.5 then:
1202:     return 'normal'
1203: else if row['N_CAN_ID_484'] >= 0.5 and row['P_CAN_ID_507'] >= 0.5 then:
1204:     return 'normal'
1205: else if row['N_CAN_ID_368'] >= 0.5 and row['P_CAN_ID_367'] >= 0.5 then:
1206:     return 'normal'
1207: else if row['D6'] >= 36.5 and row['D2'] < 0.5 and row['N_CAN_ID_389'] >= 0.5 then:
1208:     return 'normal'
1209: else if row['D6'] >= 36.5 and row['D2'] < 0.5 and row['N_CAN_ID_42D'] >= 0.5 then:
1210:     return 'normal'
1211: else if row['D6'] >= 36.5 and row['D2'] < 0.5 and row['P_CAN_ID_420'] >= 0.5 then:
1212:     return 'normal'
1213: else if row['D6'] >= 36.5 and row['D5'] < 1.5 and row['N_CAN_ID_421'] >= 0.5 then:
1214:     return 'normal'
1215: else if row['D6'] >= 36.5 and row['D5'] < 1.5 and row['P_CAN_ID_153'] >= 0.5 then:
1216:     return 'normal'
1217: else if row['D6'] >= 36.5 and row['D5'] < 1.5 and row['N_CAN_ID_420'] >= 0.5 then:
1218:     return 'normal'
1219: else if row['D6'] >= 36.5 and row['P_CAN_ID_389'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
1220:     return 'normal'
1221: else if row['D6'] >= 36.5 and row['P_CAN_ID_389'] >= 0.5 and row['N_CAN_ID_484'] >= 0.5 then:
1222:     return 'normal'
1223: else if row['D6'] >= 36.5 and row['P_CAN_ID_2B0'] >= 0.5 and row['N_CAN_ID_381'] >= 0.5 then:
1224:     return 'normal'
1225: else if row['D6'] >= 36.5 and row['P_CAN_ID_507'] >= 0.5 and row['N_CAN_ID_490'] >= 0.5 then:
1226:     return 'normal'
1227: else if row['D2'] < 0.5 and row['D0'] < 0.5 and row['N_CAN_ID_389'] >= 0.5 then:
1228:     return 'normal'
1229: else if row['D2'] < 0.5 and row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_485'] >= 0.5 then:
1230:     return 'normal'
1231: else if row['D2'] < 0.5 and row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_490'] >= 0.5 then:
1232:     return 'normal'
1233: else if row['D2'] < 0.5 and row['P_CAN_ID_389'] >= 0.5 and row['N_CAN_ID_490'] >= 0.5 then:
1234:     return 'normal'
1235: else if row['D2'] < 0.5 and row['P_CAN_ID_2B0'] >= 0.5 and row['N_CAN_ID_356'] >= 0.5 then:
1236:     return 'normal'
1237: else if row['D2'] < 0.5 and row['N_CAN_ID_130'] >= 0.5 and row['P_CAN_ID_507'] >= 0.5 then:
1238:     return 'normal'
1239: else if row['D2'] < 0.5 and row['N_CAN_ID_164'] >= 0.5 and row['P_CAN_ID_220'] >= 0.5 then:
1240:     return 'normal'
1241: else if row['D2'] < 0.5 and row['N_CAN_ID_47F'] >= 0.5 and row['P_CAN_ID_479'] >= 0.5 then:
1242:     return 'normal'
1243: else if row['D0'] < 0.5 and row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_47F'] >= 0.5 then:
1244:     return 'normal'
1245: else if row['D0'] < 0.5 and row['P_CAN_ID_389'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1246:     return 'normal'
1247: else if row['D3'] < 36.5 and row['N_CAN_ID_47F'] >= 0.5 and row['P_CAN_ID_436'] >= 0.5 then:
1248:     return 'normal'
1249: else if row['D2'] < 0.5 and row['N_CAN_ID_485'] >= 0.5 then:
1250:     return 'normal'
1251: else if row['D2'] < 0.5 and row['P_CAN_ID_507'] >= 0.5 then:
1252:     return 'normal'
1253: else if row['D2'] < 0.5 and row['P_CAN_ID_479'] >= 0.5 then:
1254:     return 'normal'
1255: else if row['D2'] < 0.5 and row['P_CAN_ID_593'] >= 0.5 then:
1256:     return 'normal'
1257: else if row['D5'] < 1.5 and row['N_CAN_ID_484'] >= 0.5 then:
1258:     return 'normal'
1259: else if row['D3'] < 36.5 and row['P_CAN_ID_420'] >= 0.5 then:
1260:     return 'normal'
1261: else if row['P_CAN_ID_421'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1262:     return 'normal'
1263: else if row['N_CAN_ID_421'] >= 0.5 and row['P_CAN_ID_220'] >= 0.5 then:
1264:     return 'normal'
1265: else if row['N_CAN_ID_42D'] >= 0.5 and row['P_CAN_ID_220'] >= 0.5 then:
1266:     return 'normal'
1267: else if row['D6'] >= 36.5 and row['D2'] < 0.5 and row['D7'] >= 47.5 then:
1268:     return 'normal'
1269: else if row['D2'] < 0.5 and row['D7'] >= 47.5 and row['P_CAN_ID_421'] >= 0.5 then:
1270:     return 'normal'

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1271:     else if row['D2'] < 0.5 and row['D7'] >= 47.5 and row['P_CAN_ID_153'] >= 0.5 then:
1272:         return 'normal'
1273:     else if row['D2'] < 0.5 and row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1274:         return 'normal'
1275:     else if row['D2'] < 0.5 and row['P_CAN_ID_140'] >= 0.5 and row['N_CAN_ID_381'] >= 0.5 then:
1276:         return 'normal'
1277:     else if row['D2'] < 0.5 and row['P_CAN_ID_389'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
1278:         return 'normal'
1279:     else if row['D0'] < 0.5 and row['D5'] < 1.5 and row['N_CAN_ID_420'] >= 0.5 then:
1280:         return 'normal'
1281:     else
1282:         return 'attack'
1283: else if row['Arbitration_ID'] == '381' then:
1284:     if row['N_CAN_ID_387'] >= 0.5 and row['P_CAN_ID_368'] >= 0.5 then:
1285:         return 'normal'
1286:     else if row['N_CAN_ID_387'] >= 0.5 and row['D4'] < 0.5 then:
1287:         return 'normal'
1288:     else if row['N_CAN_ID_164'] >= 0.5 and row['P_CAN_ID_48C'] >= 0.5 then:
1289:         return 'normal'
1290:     else if row['D0'] >= 127.5 and row['D3'] < 0.5 and row['P_CAN_ID_340'] >= 0.5 then:
1291:         return 'normal'
1292:     else if row['D0'] >= 127.5 and row['D3'] < 0.5 and row['N_CAN_ID_251'] >= 0.5 then:
1293:         return 'normal'
1294:     else if row['D0'] >= 127.5 and row['D3'] < 0.5 and row['P_CAN_ID_47F'] >= 0.5 then:
1295:         return 'normal'
1296:     else if row['D0'] >= 127.5 and row['D3'] < 0.5 and row['P_CAN_ID_492'] >= 0.5 then:
1297:         return 'normal'
1298:     else if row['D0'] >= 127.5 and row['D3'] < 0.5 and row['N_CAN_ID_394'] >= 0.5 then:
1299:         return 'normal'
1300:     else if row['D0'] >= 127.5 and row['D3'] < 0.5 and row['P_CAN_ID_485'] >= 0.5 then:
1301:         return 'normal'
1302:     else if row['D0'] >= 127.5 and row['D3'] < 0.5 and row['P_CAN_ID_4F1'] >= 0.5 then:
1303:         return 'normal'
1304:     else if row['D0'] >= 127.5 and row['P_CAN_ID_368'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
1305:         return 'normal'
1306:     else if row['D0'] >= 127.5 and row['D0'] < 128.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1307:         return 'normal'
1308:     else if row['D0'] >= 127.5 and row['D0'] < 128.5 and row['P_CAN_ID_140'] >= 0.5 then:
1309:         return 'normal'
1310:     else if row['D0'] >= 127.5 and row['D0'] < 128.5 and row['P_CAN_ID_389'] >= 0.5 then:
1311:         return 'normal'
1312:     else if row['D0'] >= 127.5 and row['D0'] < 128.5 and row['P_CAN_ID_484'] >= 0.5 then:
1313:         return 'normal'
1314:     else if row['D7'] < 5.5 and row['D7'] >= 4.5 then:
1315:         return 'normal'
1316:     else
1317:         return 'attack'
1318: else if row['Arbitration_ID'] == '386' then:
1319:     if row['D4'] >= 50.5 and row['N_CAN_ID_44E'] >= 0.5 then:
1320:         return 'normal'
1321:     else if row['D4'] >= 50.5 and row['N_CAN_ID_479'] >= 0.5 then:
1322:         return 'normal'
1323:     else if row['D4'] >= 50.5 and row['N_CAN_ID_410'] >= 0.5 then:
1324:         return 'normal'
1325:     else if row['D4'] >= 50.5 and row['N_CAN_ID_07F'] >= 0.5 then:
1326:         return 'normal'
1327:     else if row['D4'] >= 50.5 and row['N_CAN_ID_4C9'] >= 0.5 then:
1328:         return 'normal'
1329:     else if row['D6'] >= 32.5 and row['N_CAN_ID_44E'] >= 0.5 then:
1330:         return 'normal'
1331:     else if row['D6'] >= 32.5 and row['N_CAN_ID_4CB'] >= 0.5 then:
1332:         return 'normal'
1333:     else if row['TimeInterval'] < 0.00023651123046870002 and row['N_CAN_ID_44E'] >= 0.5 then:
1334:         return 'normal'
1335:     else if row['P_CAN_ID_368'] >= 0.5 and row['N_CAN_ID_356'] >= 0.5 then:
1336:         return 'normal'
1337:     else if row['P_CAN_ID_368'] >= 0.5 and row['N_CAN_ID_479'] >= 0.5 then:
1338:         return 'normal'
1339:     else if row['P_CAN_ID_368'] >= 0.5 and row['N_CAN_ID_485'] >= 0.5 then:
1340:         return 'normal'
1341:     else if row['P_CAN_ID_368'] >= 0.5 and row['N_CAN_ID_495'] >= 0.5 then:
1342:         return 'normal'
1343:     else if row['D5'] >= 63.5 and row['N_CAN_ID_410'] >= 0.5 then:
1344:         return 'normal'
1345:     else if row['D1'] >= 127.5 and row['N_CAN_ID_48A'] >= 0.5 then:
1346:         return 'normal'
1347:     else if row['D1'] >= 127.5 and row['N_CAN_ID_484'] >= 0.5 then:
1348:         return 'normal'
1349:     else if row['N_CAN_ID_490'] >= 0.5 and row['P_CAN_ID_164'] >= 0.5 then:
1350:         return 'normal'
1351:     else if row['D4'] >= 50.5 and row['D6'] >= 32.5 and row['N_CAN_ID_520'] >= 0.5 then:
1352:         return 'normal'
1353:     else if row['D4'] >= 50.5 and row['D7'] >= 63.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1354:         return 'normal'
1355:     else if row['D4'] >= 50.5 and row['D7'] >= 63.5 and row['N_CAN_ID_42D'] >= 0.5 then:

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1356:     return 'normal'
1357: else if row['D4'] >= 50.5 and row['D0'] >= 45.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1358:     return 'normal'
1359: else if row['D4'] >= 50.5 and row['D0'] >= 45.5 and row['N_CAN_ID_436'] >= 0.5 then:
1360:     return 'normal'
1361: else if row['D4'] >= 50.5 and row['D0'] >= 45.5 and row['N_CAN_ID_48A'] >= 0.5 then:
1362:     return 'normal'
1363: else if row['D4'] >= 50.5 and row['D7'] >= 127.5 and row['D2'] >= 29.5 then:
1364:     return 'normal'
1365: else if row['D4'] >= 50.5 and row['P_CAN_ID_368'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1366:     return 'normal'
1367: else if row['D4'] >= 50.5 and row['P_CAN_ID_368'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
1368:     return 'normal'
1369: else if row['D4'] >= 50.5 and row['D1'] >= 63.5 and row['D3'] >= 63.5 then:
1370:     return 'normal'
1371: else if row['D6'] >= 32.5 and row['D7'] >= 63.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1372:     return 'normal'
1373: else if row['D6'] >= 32.5 and row['D2'] >= 29.5 and row['N_CAN_ID_436'] >= 0.5 then:
1374:     return 'normal'
1375: else if row['D6'] >= 32.5 and row['P_CAN_ID_368'] >= 0.5 and row['D3'] >= 64.5 then:
1376:     return 'normal'
1377: else if row['D7'] >= 63.5 and row['P_CAN_ID_368'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
1378:     return 'normal'
1379: else if row['D7'] >= 63.5 and row['D3'] >= 63.5 and row['N_CAN_ID_436'] >= 0.5 then:
1380:     return 'normal'
1381: else if row['D7'] >= 63.5 and row['D5'] >= 127.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1382:     return 'normal'
1383: else if row['D7'] >= 63.5 and row['D1'] >= 127.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1384:     return 'normal'
1385: else if row['D7'] >= 63.5 and row['D3'] >= 127.5 and row['N_CAN_ID_366'] >= 0.5 then:
1386:     return 'normal'
1387: else if row['D7'] >= 63.5 and row['P_CAN_ID_2B0'] >= 0.5 and row['N_CAN_ID_356'] >= 0.5 then:
1388:     return 'normal'
1389: else if row['D7'] >= 127.5 and row['N_CAN_ID_391'] >= 0.5 and row['P_CAN_ID_340'] >= 0.5 then:
1390:     return 'normal'
1391: else if row['P_CAN_ID_368'] >= 0.5 and row['D1'] >= 63.5 and row['N_CAN_ID_520'] >= 0.5 then:
1392:     return 'normal'
1393: else if row['D5'] >= 63.5 and row['D3'] >= 63.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1394:     return 'normal'
1395: else
1396:     return 'attack'
1397: else if row['Arbitration_ID'] == 356 then:
1398:     if row['N_CAN_ID_366'] >= 0.5 and row['P_CAN_ID_386'] >= 0.5 then:
1399:         return 'normal'
1400:     else if row['N_CAN_ID_366'] >= 0.5 and row['P_CAN_ID_329'] >= 0.5 then:
1401:         return 'normal'
1402:     else if row['N_CAN_ID_367'] >= 0.5 and row['P_CAN_ID_381'] >= 0.5 then:
1403:         return 'normal'
1404:     else if row['D3'] >= 127.5 and row['D1'] < 0.5 and row['N_CAN_ID_367'] >= 0.5 then:
1405:         return 'normal'
1406:     else if row['D3'] >= 127.5 and row['D1'] < 0.5 and row['P_CAN_ID_366'] >= 0.5 then:
1407:         return 'normal'
1408:     else if row['D3'] >= 127.5 and row['D1'] < 0.5 and row['P_CAN_ID_386'] >= 0.5 then:
1409:         return 'normal'
1410:     else if row['D3'] >= 127.5 and row['D1'] < 0.5 and row['P_CAN_ID_164'] >= 0.5 then:
1411:         return 'normal'
1412:     else if row['D3'] >= 127.5 and row['D1'] < 0.5 and row['P_CAN_ID_492'] >= 0.5 then:
1413:         return 'normal'
1414:     else if row['D3'] >= 127.5 and row['D1'] < 0.5 and row['P_CAN_ID_387'] >= 0.5 then:
1415:         return 'normal'
1416:     else if row['D3'] >= 127.5 and row['N_CAN_ID_366'] >= 0.5 and row['P_CAN_ID_140'] >= 0.5 then:
1417:         return 'normal'
1418:     else if row['D3'] >= 127.5 and row['D3'] < 128.5 and row['N_CAN_ID_340'] >= 0.5 then:
1419:         return 'normal'
1420:     else if row['D1'] < 0.5 and row['N_CAN_ID_366'] >= 0.5 and row['P_CAN_ID_340'] >= 0.5 then:
1421:         return 'normal'
1422:     else if row['D1'] < 0.5 and row['P_CAN_ID_2B0'] >= 0.5 and row['N_CAN_ID_130'] >= 0.5 then:
1423:         return 'normal'
1424:     else if row['D6'] < 0.5 and row['D4'] >= 16.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1425:         return 'normal'
1426:     else if row['D6'] < 0.5 and row['D4'] >= 13.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1427:         return 'normal'
1428:     else if row['D3'] >= 127.5 and row['D1'] < 0.5 and row['D3'] < 128.5 then:
1429:         return 'normal'
1430:     else
1431:         return 'attack'
1432: else if row['Arbitration_ID'] == 366 then:
1433:     if row['DLC'] < 7.5 and row['N_CAN_ID_367'] >= 0.5 and row['P_CAN_ID_356'] >= 0.5 then:
1434:         return 'normal'
1435:     else if row['DLC'] < 7.5 and row['N_CAN_ID_367'] >= 0.5 and row['D3'] >= 36.5 then:
1436:         return 'normal'
1437:     else if row['DLC'] < 7.5 and row['N_CAN_ID_367'] >= 0.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1438:         return 'normal'
1439:     else if row['DLC'] < 7.5 and row['D0'] >= 32.5 and row['P_CAN_ID_356'] >= 0.5 then:
1440:         return 'normal'

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1441: else if row['DLC'] < 7.5 and row['D0'] >= 32.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1442:     return 'normal'
1443: else if row['DLC'] < 7.5 and row['D0'] >= 32.5 and row['P_CAN_ID_394'] >= 0.5 then:
1444:     return 'normal'
1445: else if row['DLC'] < 7.5 and row['D0'] >= 32.5 and row['N_CAN_ID_453'] >= 0.5 then:
1446:     return 'normal'
1447: else if row['DLC'] < 7.5 and row['D4'] >= 23.5 and row['P_CAN_ID_386'] >= 0.5 then:
1448:     return 'normal'
1449: else if row['DLC'] < 7.5 and row['N_CAN_ID_367'] >= 0.5 and row['P_CAN_ID_251'] < 0.5 then:
1450:     return 'normal'
1451: else if row['DLC'] < 7.5 and row['D0'] >= 32.5 and row['P_CAN_ID_386'] >= 0.5 then:
1452:     return 'normal'
1453: else if row['D7'] < 0.5 and row['N_CAN_ID_367'] >= 0.5 and row['P_CAN_ID_356'] >= 0.5 then:
1454:     return 'normal'
1455: else if row['D7'] < 0.5 and row['N_CAN_ID_367'] >= 0.5 and row['D3'] >= 36.5 then:
1456:     return 'normal'
1457: else if row['D7'] < 0.5 and row['N_CAN_ID_367'] >= 0.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1458:     return 'normal'
1459: else if row['D7'] < 0.5 and row['D0'] >= 32.5 and row['P_CAN_ID_356'] >= 0.5 then:
1460:     return 'normal'
1461: else if row['D7'] < 0.5 and row['D0'] >= 32.5 and row['P_CAN_ID_2B0'] >= 0.5 then:
1462:     return 'normal'
1463: else if row['D7'] < 0.5 and row['D0'] >= 32.5 and row['P_CAN_ID_394'] >= 0.5 then:
1464:     return 'normal'
1465: else if row['D7'] < 0.5 and row['D0'] >= 32.5 and row['N_CAN_ID_453'] >= 0.5 then:
1466:     return 'normal'
1467: else if row['D7'] < 0.5 and row['D4'] >= 23.5 and row['P_CAN_ID_386'] >= 0.5 then:
1468:     return 'normal'
1469: else if row['D7'] < 7.5 and row['N_CAN_ID_367'] >= 0.5 and row['P_CAN_ID_251'] < 0.5 then:
1470:     return 'normal'
1471: else if row['D7'] < 7.5 and row['D0'] >= 32.5 and row['P_CAN_ID_386'] >= 0.5 then:
1472:     return 'normal'
1473: else
1474:     return 'attack'
1475: else if row['Arbitration_ID'] == '391' then:
1476:     if row['N_CAN_ID_4F1'] >= 0.5 and row['P_CAN_ID_492'] >= 0.5 then:
1477:         return 'normal'
1478:     else if row['D3'] < 0.5 and row['D1'] < 0.5 and row['P_CAN_ID_479'] >= 0.5 then:
1479:         return 'normal'
1480:     else if row['D3'] < 0.5 and row['D1'] < 0.5 and row['N_CAN_ID_485'] >= 0.5 then:
1481:         return 'normal'
1482:     else if row['D3'] < 0.5 and row['D1'] < 0.5 and row['N_CAN_ID_42D'] >= 0.5 then:
1483:         return 'normal'
1484:     else if row['D3'] < 0.5 and row['D1'] < 0.5 and row['N_CAN_ID_410'] >= 0.5 then:
1485:         return 'normal'
1486:     else if row['D3'] < 0.5 and row['D1'] < 0.5 and row['N_CAN_ID_44E'] >= 0.5 then:
1487:         return 'normal'
1488:     else if row['D3'] < 0.5 and row['D2'] < 0.5 and row['P_CAN_ID_436'] >= 0.5 then:
1489:         return 'normal'
1490:     else if row['D3'] < 0.5 and row['D7'] >= 76.5 and row['N_CAN_ID_4F1'] >= 0.5 then:
1491:         return 'normal'
1492:     else if row['D3'] < 0.5 and row['N_CAN_ID_4F1'] >= 0.5 and row['P_CAN_ID_329'] >= 0.5 then:
1493:         return 'normal'
1494:     else if row['D3'] < 0.5 and row['N_CAN_ID_4F1'] >= 0.5 and row['P_CAN_ID_260'] >= 0.5 then:
1495:         return 'normal'
1496:     else if row['D3'] < 0.5 and row['N_CAN_ID_4F1'] >= 0.5 and row['P_CAN_ID_220'] >= 0.5 then:
1497:         return 'normal'
1498:     else if row['D1'] < 0.5 and row['D4'] < 0.5 and row['N_CAN_ID_479'] >= 0.5 then:
1499:         return 'normal'
1500:     else if row['D1'] < 0.5 and row['P_CAN_ID_386'] >= 0.5 and row['N_CAN_ID_436'] >= 0.5 then:
1501:         return 'normal'
1502:     else if row['D5'] < 0.5 and row['N_CAN_ID_4F1'] >= 0.5 and row['P_CAN_ID_140'] >= 0.5 then:
1503:         return 'normal'
1504:     else if row['D4'] < 0.5 and row['D7'] >= 76.5 and row['N_CAN_ID_48A'] >= 0.5 then:
1505:         return 'normal'
1506:     else if row['D6'] < 14.5 and row['P_CAN_ID_387'] >= 0.5 and row['N_CAN_ID_394'] >= 0.5 then:
1507:         return 'normal'
1508:     else if row['D3'] < 0.5 and row['P_CAN_ID_572'] >= 0.5 then:
1509:         return 'normal'
1510:     else if row['N_CAN_ID_4F1'] >= 0.5 and row['P_CAN_ID_47F'] >= 0.5 then:
1511:         return 'normal'
1512:     else if row['N_CAN_ID_4F1'] >= 0.5 and row['P_CAN_ID_485'] >= 0.5 then:
1513:         return 'normal'
1514:     else if row['P_CAN_ID_329'] >= 0.5 and row['N_CAN_ID_484'] >= 0.5 then:
1515:         return 'normal'
1516:     else if row['D3'] < 0.5 and row['D1'] < 0.5 and row['N_CAN_ID_495'] >= 0.5 then:
1517:         return 'normal'
1518:     else if row['D3'] < 0.5 and row['D2'] < 0.5 and row['P_CAN_ID_220'] >= 0.5 then:
1519:         return 'normal'
1520:     else if row['D3'] < 0.5 and row['D5'] < 0.5 and row['P_CAN_ID_492'] >= 0.5 then:
1521:         return 'normal'
1522:     else if row['D3'] < 0.5 and row['D5'] < 0.5 and row['N_CAN_ID_484'] >= 0.5 then:
1523:         return 'normal'
1524:     else if row['D3'] < 0.5 and row['D0'] < 0.5 and row['P_CAN_ID_4C9'] >= 0.5 then:
1525:         return 'normal'

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1526:   else if row['D3'] < 0.5 and row['D4'] < 0.5 and row['P_CAN_ID_387'] >= 0.5 then:
1527:       return 'normal'
1528:   else if row['D3'] < 0.5 and row['D4'] < 0.5 and row['N_CAN_ID_436'] >= 0.5 then:
1529:       return 'normal'
1530:   else if row['D3'] < 0.5 and row['D7'] >= 76.5 and row['P_CAN_ID_386'] >= 0.5 then:
1531:       return 'normal'
1532:   else if row['D3'] < 0.5 and row['D7'] >= 76.5 and row['P_CAN_ID_520'] >= 0.5 then:
1533:       return 'normal'
1534:   else if row['D3'] < 0.5 and row['N_CAN_ID_4F1'] >= 0.5 and row['P_CAN_ID_340'] >= 0.5 then:
1535:       return 'normal'
1536:   else if row['D3'] < 0.5 and row['N_CAN_ID_4F1'] >= 0.5 and row['P_CAN_ID_386'] >= 0.5 then:
1537:       return 'normal'
1538:   else if row['D1'] < 0.5 and row['D5'] < 0.5 and row['D7'] >= 76.5 then:
1539:       return 'normal'
1540:   else if row['D1'] < 0.5 and row['D6'] < 14.5 and row['P_CAN_ID_5A6'] >= 0.5 then:
1541:       return 'normal'
1542:   else
1543:       return 'attack'
1544:   else if row['Arbitration_ID'] == '394' then:
1545:       if row['D7'] >= 151.5 and row['D3'] < 0.5 and row['P_CAN_ID_366'] >= 0.5 then:
1546:           return 'normal'
1547:       else if row['D7'] >= 151.5 and row['D2'] < 0.5 and row['P_CAN_ID_5CD'] >= 0.5 then:
1548:           return 'normal'
1549:       else if row['D7'] >= 151.5 and row['D6'] >= 16.5 and row['N_CAN_ID_453'] >= 0.5 then:
1550:           return 'normal'
1551:       else if row['D7'] >= 151.5 and row['D6'] >= 15.5 and row['N_CAN_ID_453'] >= 0.5 then:
1552:           return 'normal'
1553:       else if row['D7'] >= 151.5 and row['D0'] < 0.5 and row['N_CAN_ID_366'] >= 0.5 then:
1554:           return 'normal'
1555:       else if row['D7'] >= 151.5 and row['D4'] >= 6.5 and row['P_CAN_ID_500'] >= 0.5 then:
1556:           return 'normal'
1557:       else if row['D7'] >= 151.5 and row['D4'] >= 6.5 and row['P_CAN_ID_485'] >= 0.5 then:
1558:           return 'normal'
1559:       else if row['D7'] >= 151.5 and row['P_CAN_ID_387'] >= 0.5 and row['D7'] < 152.5 then:
1560:           return 'normal'
1561:       else if row['D7'] >= 151.5 and row['N_CAN_ID_164'] >= 0.5 and row['P_CAN_ID_389'] >= 0.5 then:
1562:           return 'normal'
1563:       else if row['D7'] >= 151.5 and row['D7'] < 152.5 and row['P_CAN_ID_391'] >= 0.5 then:
1564:           return 'normal'
1565:       else if row['D7'] >= 151.5 and row['D7'] < 152.5 and row['N_CAN_ID_420'] >= 0.5 then:
1566:           return 'normal'
1567:       else if row['D7'] >= 151.5 and row['D7'] < 152.5 and row['N_CAN_ID_436'] >= 0.5 then:
1568:           return 'normal'
1569:       else if row['D7'] >= 151.5 and row['D7'] < 152.5 and row['P_CAN_ID_4F1'] >= 0.5 then:
1570:           return 'normal'
1571:       else if row['D7'] >= 151.5 and row['D7'] < 152.5 and row['P_CAN_ID_340'] >= 0.5 then:
1572:           return 'normal'
1573:       else if row['D7'] >= 151.5 and row['D7'] < 152.5 and row['P_CAN_ID_492'] >= 0.5 then:
1574:           return 'normal'
1575:       else if row['D7'] >= 151.5 and row['D7'] < 152.5 and row['P_CAN_ID_50C'] >= 0.5 then:
1576:           return 'normal'
1577:       else if row['D3'] < 0.5 and row['D6'] >= 16.5 and row['P_CAN_ID_38D'] >= 0.5 then:
1578:           return 'normal'
1579:       else if row['D4'] >= 6.5 and row['D1'] >= 63.5 and row['P_CAN_ID_329'] >= 0.5 then:
1580:           return 'normal'
1581:       else if row['D7'] >= 151.5 and row['N_CAN_ID_412'] >= 0.5 then:
1582:           return 'normal'
1583:       else if row['P_CAN_ID_387'] >= 0.5 and row['N_CAN_ID_421'] >= 0.5 then:
1584:           return 'normal'
1585:       else if row['P_CAN_ID_387'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1586:           return 'normal'
1587:       else if row['N_CAN_ID_420'] >= 0.5 and row['P_CAN_ID_366'] >= 0.5 then:
1588:           return 'normal'
1589:       else if row['N_CAN_ID_436'] >= 0.5 and row['P_CAN_ID_381'] >= 0.5 then:
1590:           return 'normal'
1591:       else if row['D7'] >= 151.5 and row['D3'] < 0.5 and row['D7'] < 152.5 then:
1592:           return 'normal'
1593:       else if row['P_CAN_ID_387'] >= 0.5 and row['N_CAN_ID_421'] >= 0.5 then:
1594:           return 'normal'
1595:       else if row['P_CAN_ID_387'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1596:           return 'normal'
1597:       else if row['P_CAN_ID_391'] >= 0.5 and row['N_CAN_ID_412'] >= 0.5 then:
1598:           return 'normal'
1599:       else if row['N_CAN_ID_420'] >= 0.5 and row['P_CAN_ID_366'] >= 0.5 then:
1600:           return 'normal'
1601:       else if row['N_CAN_ID_436'] >= 0.5 and row['P_CAN_ID_381'] >= 0.5 then:
1602:           return 'normal'
1603:       else if row['D3'] < 0.5 and row['D6'] >= 16.5 and row['P_CAN_ID_38D'] >= 0.5 then:
1604:           return 'normal'
1605:       else if row['D3'] < 0.5 and row['D6'] >= 16.5 and row['N_CAN_ID_38D'] >= 0.5 then:
1606:           return 'normal'
1607:       else if row['D3'] < 0.5 and row['D4'] >= 6.5 and row['P_CAN_ID_485'] >= 0.5 then:
1608:           return 'normal'
1609:       else if row['D3'] < 0.5 and row['N_CAN_ID_453'] >= 0.5 and row['P_CAN_ID_391'] >= 0.5 then:
1610:           return 'normal'

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1611: else if row['D3'] < 0.5 and row['N_CAN_ID_453'] >= 0.5 and row['P_CAN_ID_368'] >= 0.5 then:
1612:     return 'normal'
1613: else if row['D2'] < 0.5 and row['D1'] >= 31.5 and row['P_CAN_ID_387'] >= 0.5 then:
1614:     return 'normal'
1615: else if row['D2'] < 0.5 and row['D1'] >= 31.5 and row['P_CAN_ID_500'] >= 0.5 then:
1616:     return 'normal'
1617: else if row['D2'] < 0.5 and row['D1'] >= 63.5 and row['P_CAN_ID_389'] >= 0.5 then:
1618:     return 'normal'
1619: else if row['D2'] < 0.5 and row['D1'] >= 63.5 and row['P_CAN_ID_5CD'] >= 0.5 then:
1620:     return 'normal'
1621: else if row['D2'] < 0.5 and row['D5'] >= 2.5 and row['N_CAN_ID_420'] >= 0.5 then:
1622:     return 'normal'
1623: else if row['D2'] < 0.5 and row['D5'] >= 2.5 and row['N_CAN_ID_412'] >= 0.5 then:
1624:     return 'normal'
1625: else if row['D2'] < 0.5 and row['D5'] >= 34.5 and row['P_CAN_ID_492'] >= 0.5 then:
1626:     return 'normal'
1627: else if row['D2'] < 0.5 and row['P_CAN_ID_391'] >= 0.5 and row['N_CAN_ID_436'] >= 0.5 then:
1628:     return 'normal'
1629: else if row['D0'] < 0.5 and row['D1'] >= 31.5 and row['N_CAN_ID_453'] >= 0.5 then:
1630:     return 'normal'
1631: else if row['D0'] < 0.5 and row['D1'] >= 31.5 and row['P_CAN_ID_50C'] >= 0.5 then:
1632:     return 'normal'
1633: else if row['D4'] >= 6.5 and row['D1'] >= 63.5 and row['P_CAN_ID_329'] >= 0.5 then:
1634:     return 'normal'
1635: else if row['D1'] >= 31.5 and row['N_CAN_ID_164'] >= 0.5 and row['P_CAN_ID_340'] >= 0.5 then:
1636:     return 'normal'
1637: else if row['D3'] < 0.5 and row['D2'] < 0.5 and row['N_CAN_ID_366'] >= 0.5 then:
1638:     return 'normal'
1639: else if row['D2'] < 0.5 and row['D6'] >= 16.5 and row['D1'] >= 63.5 then:
1640:     return 'normal'
1641: else if row['D2'] < 0.5 and row['D5'] >= 2.5 and row['P_CAN_ID_387'] >= 0.5 then:
1642:     return 'normal'
1643: else if row['D0'] < 0.5 and row['D1'] >= 31.5 and row['N_CAN_ID_164'] >= 0.5 then:
1644:     return 'normal'
1645: else
1646:     return 'attack'
1647: else if row['Arbitration_ID'] == '389' then:
1648:     if row['D1'] < 0.5 and row['P_CAN_ID_50A'] >= 0.5 then:
1649:         return 'normal'
1650:     else if row['P_CAN_ID_421'] >= 0.5 and row['N_CAN_ID_453'] >= 0.5 then:
1651:         return 'normal'
1652:     else if row['P_CAN_ID_421'] >= 0.5 and row['N_CAN_ID_47F'] >= 0.5 then:
1653:         return 'normal'
1654:     else if row['P_CAN_ID_421'] >= 0.5 and row['N_CAN_ID_381'] >= 0.5 then:
1655:         return 'normal'
1656:     else if row['P_CAN_ID_421'] >= 0.5 and row['N_CAN_ID_436'] >= 0.5 then:
1657:         return 'normal'
1658:     else if row['P_CAN_ID_421'] >= 0.5 and row['N_CAN_ID_485'] >= 0.5 then:
1659:         return 'normal'
1660:     else if row['D1'] < 0.5 and row['D7'] < 0.5 and row['N_CAN_ID_485'] >= 0.5 then:
1661:         return 'normal'
1662:     else if row['D1'] < 0.5 and row['P_CAN_ID_421'] >= 0.5 and row['N_CAN_ID_340'] >= 0.5 then:
1663:         return 'normal'
1664:     else if row['D1'] < 0.5 and row['P_CAN_ID_340'] >= 0.5 and row['N_CAN_ID_453'] >= 0.5 then:
1665:         return 'normal'
1666:     else if row['D1'] < 0.5 and row['P_CAN_ID_340'] >= 0.5 and row['N_CAN_ID_381'] >= 0.5 then:
1667:         return 'normal'
1668:     else if row['D7'] < 0.5 and row['D6'] >= 28.5 and row['P_CAN_ID_421'] >= 0.5 then:
1669:         return 'normal'
1670:     else if row['D7'] < 0.5 and row['D6'] >= 28.5 and row['D4'] < 0.5 then:
1671:         return 'normal'
1672:     else if row['D1'] < 0.5 and row['D7'] < 0.5 and row['N_CAN_ID_544'] >= 0.5 then:
1673:         return 'normal'
1674:     else if row['D7'] < 0.5 and row['D4'] < 0.5 and row['P_CAN_ID_387'] >= 0.5 then:
1675:         return 'normal'
1676:     else if row['P_CAN_ID_421'] >= 0.5 and row['D0'] < 0.5 and row['D3'] < 32.5 then:
1677:         return 'normal'
1678:     else if row['D0'] < 0.5 and row['P_CAN_ID_340'] >= 0.5 and row['N_CAN_ID_47F'] >= 0.5 then:
1679:         return 'normal'
1680:     else
1681:         return 'attack'
1682: else if row['Arbitration_ID'] == '387' then:
1683:     if row['P_CAN_ID_381'] >= 0.5 and row['N_CAN_ID_394'] >= 0.5 then:
1684:         return 'normal'
1685:     else if row['P_CAN_ID_381'] >= 0.5 and row['N_CAN_ID_38D'] >= 0.5 then:
1686:         return 'normal'
1687:     else if row['P_CAN_ID_381'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1688:         return 'normal'
1689:     else if row['P_CAN_ID_381'] >= 0.5 and row['N_CAN_ID_389'] >= 0.5 then:
1690:         return 'normal'
1691:     else if row['P_CAN_ID_381'] >= 0.5 and row['N_CAN_ID_412'] >= 0.5 then:
1692:         return 'normal'
1693:     else if row['P_CAN_ID_381'] >= 0.5 and row['D7'] < 0.5 and row['D0'] >= 32.5 then:
1694:         return 'normal'
1695:     else if row['P_CAN_ID_381'] >= 0.5 and row['D7'] < 0.5 and row['D5'] >= 52.5 then:

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1696:     return 'normal'
1697: else if row['D7'] < 0.5 and row['D2'] >= 30.5 and row['N_CAN_ID_453'] >= 0.5 then:
1698:     return 'normal'
1699: else if row['D7'] < 0.5 and row['D5'] >= 52.5 and row['N_CAN_ID_394'] >= 0.5 then:
1700:     return 'normal'
1701: else if row['D7'] < 0.5 and row['P_CAN_ID_368'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1702:     return 'normal'
1703: else if row['TimeInterval'] < 0.00023651123046870002 and row['N_CAN_ID_394'] >= 0.5 and row['P_CAN_ID_368'] >= 0.5 then:
1704:     return 'normal'
1705: else if row['P_CAN_ID_381'] >= 0.5 and row['D7'] < 0.5 and row['D1'] >= 65.5 then:
1706:     return 'normal'
1707: else if row['D7'] < 0.5 and row['D2'] >= 30.5 and row['P_CAN_ID_368'] >= 0.5 then:
1708:     return 'normal'
1709: else if row['D7'] < 0.5 and row['D5'] >= 52.5 and row['N_CAN_ID_38D'] >= 0.5 then:
1710:     return 'normal'
1711: else if row['D2'] >= 30.5 and row['D0'] >= 32.5 and row['N_CAN_ID_453'] >= 0.5 then:
1712:     return 'normal'
1713: else if row['D2'] >= 30.5 and row['D0'] >= 32.5 and row['N_CAN_ID_412'] >= 0.5 then:
1714:     return 'normal'
1715: else if row['D2'] >= 30.5 and row['D4'] < 0.5 and row['N_CAN_ID_453'] >= 0.5 then:
1716:     return 'normal'
1717: else if row['D0'] >= 32.5 and row['D4'] < 0.5 and row['N_CAN_ID_453'] >= 0.5 then:
1718:     return 'normal'
1719: else if row['TimeInterval'] < 0.00023651123046870002 and row['N_CAN_ID_394'] >= 0.5 and row['P_CAN_ID_368'] >= 0.5 then:
1720:     return 'normal'
1721: else if row['D5'] >= 52.5 and row['D3'] >= 65.5 and row['N_CAN_ID_394'] >= 0.5 then:
1722:     return 'normal'
1723: else if row['D2'] >= 30.5 and row['N_CAN_ID_394'] >= 0.5 then:
1724:     return 'normal'
1725: else if row['D2'] >= 30.5 and row['N_CAN_ID_389'] >= 0.5 then:
1726:     return 'normal'
1727: else if row['D4'] < 0.5 and row['N_CAN_ID_412'] >= 0.5 then:
1728:     return 'normal'
1729: else if row['D5'] >= 52.5 and row['N_CAN_ID_38D'] >= 0.5 then:
1730:     return 'normal'
1731: else if row['P_CAN_ID_368'] >= 0.5 and row['N_CAN_ID_391'] >= 0.5 then:
1732:     return 'normal'
1733: else if row['D4'] < 0.5 and row['D3'] >= 65.5 and row['N_CAN_ID_389'] >= 0.5 then:
1734:     return 'normal'
1735: else if row['D5'] >= 52.5 and row['D3'] >= 65.5 and row['N_CAN_ID_453'] >= 0.5 then:
1736:     return 'normal'
1737: else
1738:     return 'attack'
1739: else if row['Arbitration_ID'] == '367' then:
1740:     if row['N_CAN_ID_368'] >= 0.5 and row['P_CAN_ID_366'] >= 0.5 then:
1741:         return 'normal'
1742:     else if row['N_CAN_ID_368'] >= 0.5 and row['D3'] < 0.5 then:
1743:         return 'normal'
1744:     else if row['P_CAN_ID_366'] >= 0.5 and row['D5'] < 0.5 and row['D6'] >= 32.5 then:
1745:         return 'normal'
1746:     else if row['P_CAN_ID_366'] >= 0.5 and row['N_CAN_ID_340'] >= 0.5 then:
1747:         return 'normal'
1748:     else if row['D3'] < 0.5 and row['D6'] >= 32.5 and row['P_CAN_ID_356'] >= 0.5 then:
1749:         return 'normal'
1750:     else if row['D3'] < 0.5 and row['D4'] >= 4.5 and row['P_CAN_ID_356'] >= 0.5 then:
1751:         return 'normal'
1752:     else
1753:         return 'attack'
1754: else if row['Arbitration_ID'] == '368' then:
1755:     if row['P_CAN_ID_367'] >= 0.5 and row['D3'] < 0.5 then:
1756:         return 'normal'
1757:     else if row['D3'] < 0.5 and row['N_CAN_ID_386'] >= 0.5 then:
1758:         return 'normal'
1759:     else if row['D3'] < 0.5 and row['D7'] >= 65.5 and row['N_CAN_ID_387'] >= 0.5 then:
1760:         return 'normal'
1761:     else if row['D3'] < 0.5 and row['D0'] < 0.5 and row['N_CAN_ID_381'] >= 0.5 then:
1762:         return 'normal'
1763:     else if row['D4'] < 3.5 and row['D4'] >= 0.5 and row['P_CAN_ID_340'] >= 0.5 then:
1764:         return 'normal'
1765:     else
1766:         return 'attack'
1767: else
1768:     return 'attack'

```