ML3H1 Pseudocode

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Algorithm 1 ML3H1

1: **procedure** ML3H1
2:     Define serial port and e-mail to create HumanReaction object
3:     Request participant demographics
4:     Use data from demographics to determine dominant and non-dominant hand
5:     Non-dominant hand is set to left by default
6:     **if** The subject's dominant hand is left **then**
7:         Non-dominant hand is right
8:     **else if** The subject is ambidextrious **then**
9:         The dominant hand is set to right
10:     Request input for how many trials to run
11:     Notify subject to use dominant hand first
12:     Run HRTRIAL with the created object, dominant hand, and amount of trials entered
13:     Notify subject to use non-dominant hand first
14:     Run HRTRIAL with the created object, non-dominant hand, and amount of trials entered
15:     Run HRAVERAGES to retrieve class set averages
16:     Calculate averages of subject and print out comparisons to class set

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17: **procedure** HRTRIAL
18:     **if** The subject is right-handed **then**
19:         Set full hand name to right (instead of "r")
20:     **for** i from 1 to the amount of trials **do**
21:         Run a single reaction test
22:         Record results
23:         Upload datapoint
24:     Return a matrix with all three reaction test data

25: **procedure** HRAVERAGES
26:     Retrieve class data set
27:     Convert table to an array
28:     **for** i from 1 to the height of the matrix **do**
29:         **if** The subjects dominant hand is the same as test hand, or if subject is ambidextrous **then**
30:             Add data to dominant count
31:             Increase number of dominant datapoints by one
32:         **else**
33:             Add data to non-dominant count
34:             Increase number of non-dominant datapoints by one
35:     Return mean of dominant and non-dominant class set averages

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