**General Data Translations**

(x,y,z) ~ (right, forward, up) (on watch it’s arm back, right, up)

Run data-processing first, then model.ipynb; I can adjust the code as needed

Type 1 categorization: Forward (1), Left (2), Right (3), Pushup (4), Other (5)

Type 2 categorization: Forward\_s (1), Forward\_e (2), Left\_s (3), Left\_e (4), Right\_s (5), Right\_e (6), Pushup\_s (7), Pushup\_e (8), Stationary (9), Other (10)

Type 3 categorization: Forward\_k\_s (1), Forward\_k\_e (2), Forward\_t\_s (3), Forward\_t\_e (4), Left\_p\_s (5), Left\_p\_e (6), Left\_h\_s (7), Left\_h\_e (8), Right\_p\_s (9), Right\_p\_e (10), Right\_h\_s (11), Right\_h\_e (12), Pushup\_s (13), Pushup\_e (14), Stationary (15), Other (16)

Type 4 categorization: Forward (1), Lateral (2), Pushup (3), Other (4)

Type 5 categorization: Forward\_s (1), Forward\_e (2), Lateral\_s (3), Lateral\_e (4), Pushup\_s (5), Pushup\_e (6), Stationary (7), Other (8)

Type 6 categorization: Start (1), End (2), Stationary (3), Other (4)

Type 7 categorization: Border (1), Stationary (2), Other (3)

Type 8 categorization: Moving (1), Stationary (2)

<https://www.youtube.com/watch?v=FMudH2gyJi8>

<https://www.youtube.com/watch?v=JHEVGrpylxw>

<https://www.youtube.com/watch?v=BdzcYiI-16g>

MENTION THE IDEA of splitting them further and then recombining them. (1) This way we can better categorize them since there are two versions of some of the exercises. (2) We might also want to split them into two categories based on which arm the watch is on. (3) What if we also later test what happens when someone goes straight from a right lean to a left lean? (4) what if someone tries to check their watch during time, should we label those differently?

**File Translations**

Overall: COMBINED\_Type3-Freq10-Labeled\_Motion-sessions\_23-24\_Fall.csv – [some 15s, some 30s] (combines all other labeled spreadsheets’ data up to and including Week 3’s ~~Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_21-18-57.csv~~) {with 10 sequence length: 51% accuracy, with 40 sequence length: 47% accuracy} {With type 5 and 10 sequence length: 51% accuracy}

Current accuracy: 52% accuracy

Previous accuracies:

1. Pre-10/26/23: COMBINED\_Type3-Freq10-Labeled\_Motion-sessions\_23-24\_Fall.csv – [some 15s, some 30s] (combines all other labeled spreadsheets’ data up to and including Week 3’s Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_21-18-57.csv (the one last edited 9/18/23 5:20PM with 124KB)) {with 10 sequence length: 47% accuracy, with 40 sequence length: 45% accuracy}

Week 1:

1. Type3-Freq10-Labeled\_Motion-sessions\_2023-08-26\_17-25-54.csv – [All 15s] (Left Push, Right Push)
2. Type3-Freq10-Labeled\_Motion-sessions\_2023-08-26\_17-35-54.csv – [All 15s] Session 0: (Left Hold, Right Hold), Sessions 1 & 2: (Left Push, Right Push, Left Hold, Right Hold)

Week 3:

1. Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_15-34-42.csv – [All 15s] (Forward Knee, Pushup, Forward Table)
2. Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_15-42-38.csv – Others
3. Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_15-46-56 .csv – [All 15s] (Other, Pushup, Forward Knee, Forward Table, Other) (Others: stop looking at watch, start looking at watch)
4. Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_15-56-46.csv – [All 15s] (Forward Table, Pushup, Other, Forward Knee, Other) (Others: moving chair, looking at watch)
5. Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_16-32-02.csv – [30s, 15s, 15s, 30s] (Pushup, Right Push, Right Hold, Forward Table) (Looking at watch before and after)
6. Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_21-11-47.csv – [30s, 15s, 30s, 15s] (Left Push, Forward Table, Right Push, Right Push) (Looking at watch before and after)
7. Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_21-18-57.csv – [15s, 30s, 30s] (Left Push, Left Hold, Other, Right Hold) (Other was picking up, strumming, and putting down a guitar; Looking at watch before and after session)
8. Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_21-28-59.csv – [30s, 30s, 15s, 15s] (Front Table, Left Hold, Front Knee, Pushup) (Looking at watch b&a)
9. Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_21-51-15.csv – [15s, 30s, 30s, 30s] (Right Push, Forward Knee, Left Push, Right Push) (Looking at watch b&a)
10. Type3-Freq10-Labeled\_Motion-sessions\_2023-09-09\_21-59-38.csv – [30s, 15s, 30s, 15s] (Right Push, Right Hold, Forward Table, Right Hold) (Looking at watch b&a)
11. 9/25/23