Saturday, July 14, 2018

Data format:

(x(mm), y(mm), z(mm), yaw(degree), pitch(degree), roll(degree))

0 <= yaw <= 360; -90 <= pitch <= 90; 0 <= roll <= 360;

Since the z value is not accurate right now, we assume every z to be 1550 (mm)

When yaw = 0, it is heading the direction (0, -1, 0)

For example, if we have a sample of data to be (3600, 2580, 1450, 195, 30, 20)

It means the position of current location is (3600, 2580, 1550)

The direction of the pointing is:

(1* sin(360-yaw)*cos(pitch), -1* cos(360-yaw)*cos(pitch), sin(pitch))

The location of three appliances are:

Light: (3300, 2890, 1900)

Monitor:(1900,2700,1300)

Music player:(0, 3650, 1000)

The location of 4 anchors (m):

(0,0,2500), (4270,0,2500), (-240,8680,2500), (4520,8690,2500)