Vocabulary for Robot Arm Movement

# Macintosh HD:Users:qianli:Downloads:IMG_7490.JPG

Assuming a cylindrical space[[1]](#footnote-1), the robot hand (camera) is originally located at point ***C***. Object for recognition is located at point ***O.***

Robot arm will move according to three types of instructions - adjusting one of three variables (distance, height, and angle). Each variable can be adjusted according to a 1/8 refinement level.

For example, a little higher means height increases by 12.5%, higher means height increases by 25%; Closer means distance reduce by 25% (based on CO length), a bit closer means distance reduce by 12.5%. A little left means clock-wise angle change of 22.5o, left means 45o clockwise angle change.

A few absolute positions can be defined as well as shortcut instruction, including, front, back, top. In addition, a “follow me” model is used for robot to be compliant to user dragging.

## Distance

1. Closer
2. A bit closer
3. Farther away
4. A bit farther away

## Height

1. Closer
2. A bit closer
3. Farther away
4. A bit farther away

## Angle

* Move to the left a bit
* Move to the left
* Move to the right a bit
* Move to the right

1. A spherical space is also possible. [↑](#footnote-ref-1)