

inertia  
dissipation

LabVIEW

roll, pitch, yaw

blender

voltage  
encoder  
rot.

Motors

Dynamic Difficulty Adjustment  
where?

difficulty definition  
measured by  
heuristic functions

(performance  
difficulty)

$$\text{Difficulty} = f(m_x, x_1)$$

best test performance.

Completion time: ~~ex) 15 sec when out of shortest path~~

completion time / expected time (shortest path)  
goal time.

healthy participant average force

ex) 80 out of 100  
80/100

RT DDA by RL

~~DDA RT RL with RL~~

Score = state

$|W-L| < \epsilon$

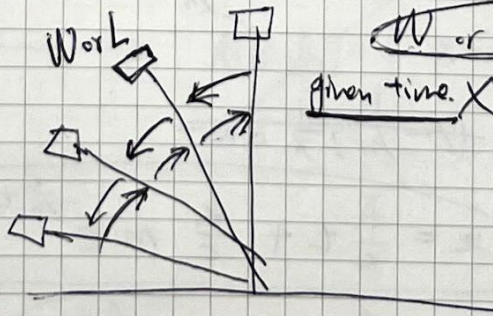
W or L rate

50:50

① Range of motion

② Coordination

③ motion control



game properties

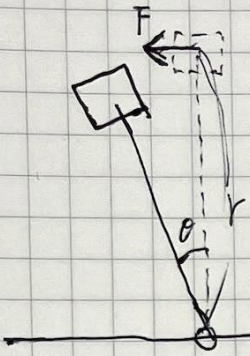
~~6~~ 6 dissipation  
parameter

$$① |W-L| < \epsilon$$

$$② |v_i - v_{it}| < \epsilon$$

$$③ \sum [v_{it} - v_i > 0] \text{ progress}$$





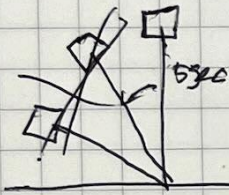
$$I\ddot{\theta} + c\dot{\theta} = \tau$$

$$\omega = \dot{\theta} = \frac{\tau}{c} - K e^{-\frac{c}{I}t}$$

$$\theta = \omega t + \theta_0$$

target : rpy

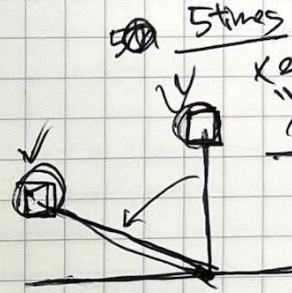
1 round



10 target posture

win lose rule...  
move in 5sec

given the



negate the  
5s → -1s...

X 6.1 X 0.9  
increase decrease

$$A_1 g_1 + A_2 g_2 + A_3 g_3$$