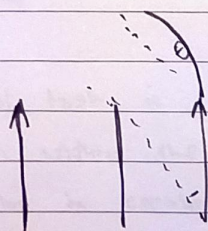
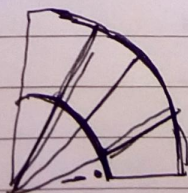


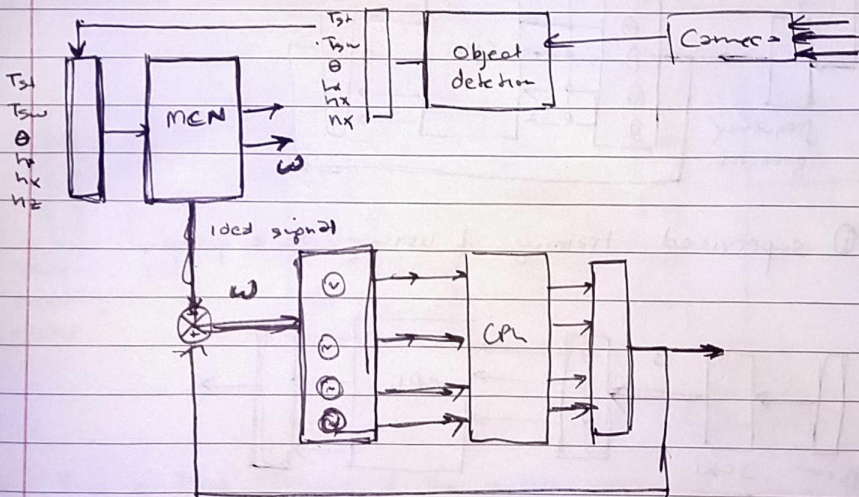
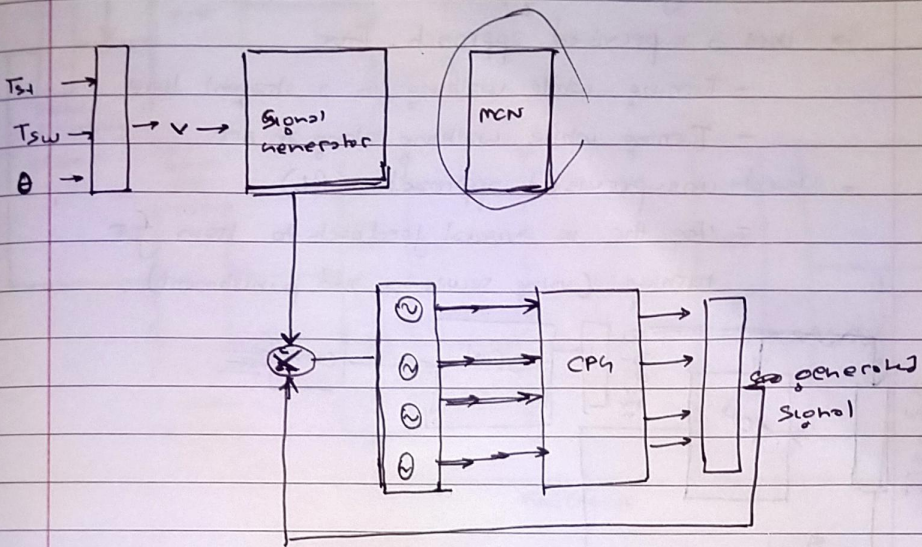
① How do we feed into turning?

How to train for





W



Object detection network will need

① How to train for turning?

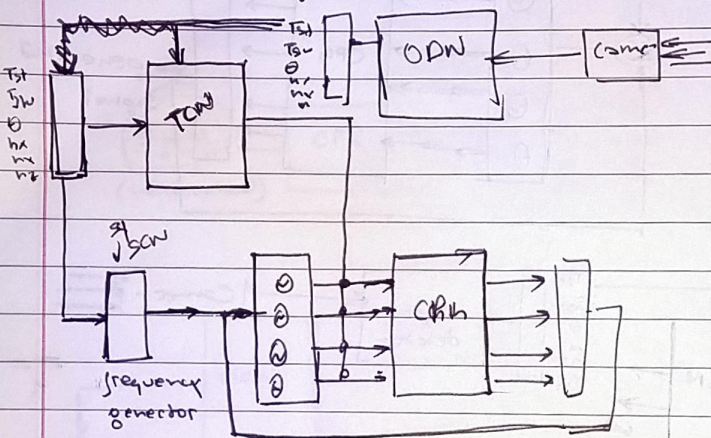
→ Used a supervised approach. Then

- Turning while walking in a straight line

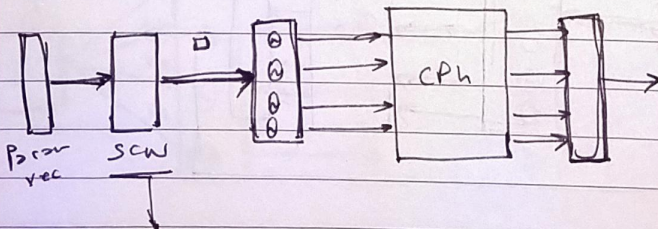
- Turning while walking along an arc.

→ Used unsupervised approach (RL)

- Use the visual feedback to train for turning (using rewards and punishment).



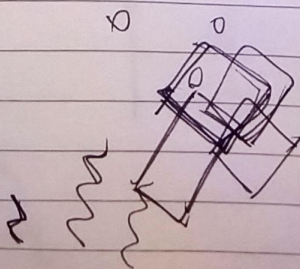
① supervised training of using back prop.

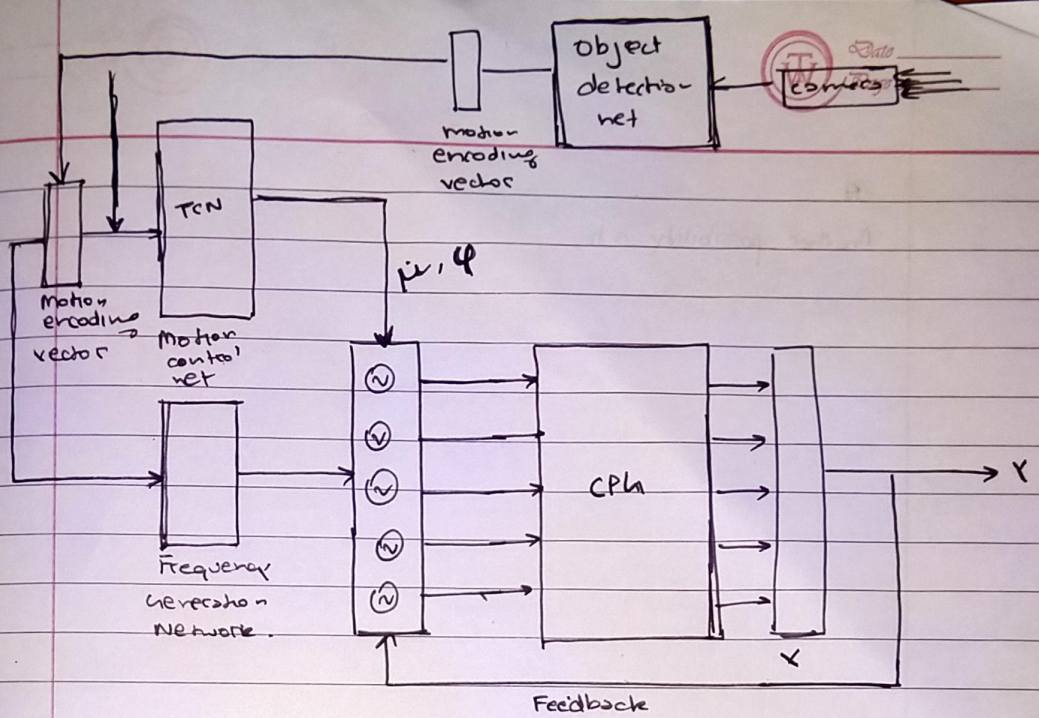


w_i
 $\phi(i)$

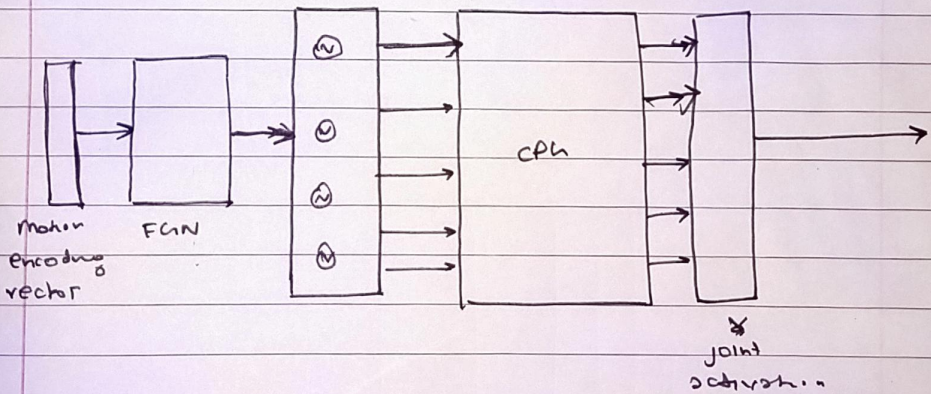
②

③





Step 1 Training (Supervised. (Data can be synthesized).



Step 2 End to End training of the entire network using RL

→ Fitness functions

- ① Gait fitness function
- ② Collision Probability function
- ③ Object Acquisition score.

This step teaches turning as well