Topics that we have discussed about:

* Introduction of RL with Causality inference
* Monte Carlo Search Tree and ideas about transfer learning

Introduction with Causality inference:

Causality inference is a statistical study about the relationship between variable A and variable B. For example, learning the effect of making a movement to the vibration. In reality, there can be many kinds of movement could affect the vibration, however, the traditional learning only studies the relationship between a specific movement and the vibration, but movements can share quite a lot similarities with each other. Therefore, we need transfer learning to transfer the knowledge.

Monte Carlo Search Tree:

For Tic-Toe, it is very feasible to simulate the tree with all possible states.

However, for board games like Chess, and go Chess, is nearly impossible to simulate all possible states. Therefore, we only search for the most promising branch. But it depends on the approximation

Alpha Go uses Convolutional Neural Network to train. If it loses, it would backtrack to the last checkpoint (node).

For top go human players, they could easily defeat average person at Wu Zi Qi due to their human ability to transfer knowledge.

**I could do the transfer learning about making the Go chess agent to play Wu Zi Qi**