## Xinyi DAI

- 1. The cost of stay in radiation for short time is lower than being hurt by enemy or killing enemy, (killing enemy is very expensive as it cost rewards every turn)and it may be a shortcut when passing through the radiation. Sometimes when the bot is being stacked by enemy with only radiations on his side, it's better for the bot to go into the radiation other than kill the bot or be hurt by enemy. e.x. if bot hurt by enemy it loss 50 but if it escape from radiation area it just loss 20. Or if bot choose to kill enemy and can't finish the game in short term like 5, it will also cost more than -20.
- 2. smallest value could influenced by the remaining turns to finish the game as the longer the turns remain, the higher the cost is if the enemy is just between the last rescue and the bot, normally it costs only 3 more points if the bot go around without passing radiation. the equation should be number of remaining rounds\*deadCost < cost of go around. the smallest value for enemyDead would induce the bot to seek out the enemy should be 1, when the enemyDead value equal or less than 0, the bot loses point to seek enemy on his way even when there's no radiation in the path, there's a punishment of 1 point every move.
- 3. Mode 2 sometimes need more study iterations to reach a higher reward. When playing as enemy, the bot moves more randomly with Vtable trained from enemy mode 2. In enemy mode 1, it tends avoid the enemy robot while in mode 2 it sometimes go to where the bot is. With enemy mode 2, the bot always make action when the enemy does, but in enemy mode 1 it stops at his position some times.