**Email** (to ask TA how to print out tensorflow data)

Question: How does we differentiate differences between script and reinforcement learning

[GitHub Repo](https://github.com/zxcvbnmditto/StarCraft2-Happy-Kitting)

**Integrate with Updated PYSC2 Qing and Chu-Hung**

Qing and Chu-Hung We have modified our code to work with the most recent update version of PYSC2. This task requires us to reexamine PYSC2’s codes, determine syntax changes from the update, and correlates those changes into our code.

**Getting Units’ Exact Coordinates Qing and Yean**

Instead of using K Means to get units’ coordinates - which wasn’t very precise and caused several problems with our code - we are now using the new features provided by PYSC2 to acquire the accurate coordinates that came directly from SC2 protobuf.

**Reward Tweaking with Health Chu-Hung and Oi**

From the recent update of PYSC2, we were able to extract the units’ HP of all units (including enemy units), and we are using these data to set rewards for our agent. The updated reward by integrating health improved our agent’s performance when training.

**Reward Value from Killing Opponent Yean and Oi**

We have a confusion that when we are not sure the killed unit reward is being calculated or is being observed, but then after running series of test, and changing the new map, we finally figure out that obs.rewards is the one we are looking and that helps us keep track of the killed unit rewards.

**Training Models (No Success) Siyuan and Nghiem**

We starting to trains model and running it on linux to try to see if the agent is improving, but our agents doesn’t seem to learning at all, we still have a long way to figure this out then we can deploy our agent to training.

**Updated Map: Reset After Victory Siyuan and Nghiem**

We have been using the maps that doesn’t reset on each round of the game, it uses other mechanism that starts a new episode, but now we have updated the map that each episode is that either the enemy or our side’s soldiers all dies out we will reset the game, like a new episode.

**Applied Batch Normalization in DQN**