

Final Project Final Turn-in – Tuning the Neural Network
50 Points

Instructions

For this portion of the final project you will continue to build on your code you started in Checkpoint 2. When you turn-in your completed code for Checkpoint 2, ensure you add “Final Turn-in” to your commit comments. Add your final report to your Github repository.

Important: When Github asks you for a team name, please put use the following format `LastName1_FirstInitial1__LastName2__FirstInitial2`. Where `LastName1`, `LastName2`, `FirstInitial1`, and `FirstInitial2` are replaced with you and your partner’s actual last names and first initials. This is so we easily see who is in what groups when we grade your PEX.

Overview

In the Final Project Final Turn-in, you will finish tuning the neural network you created in Final Project Checkpoint 2. You will record the actions you took to improve your neural network and write a short report. We also run your trained network against 5 randomly generated Simple 64 map scenarios. You will receive 4 points for each win.

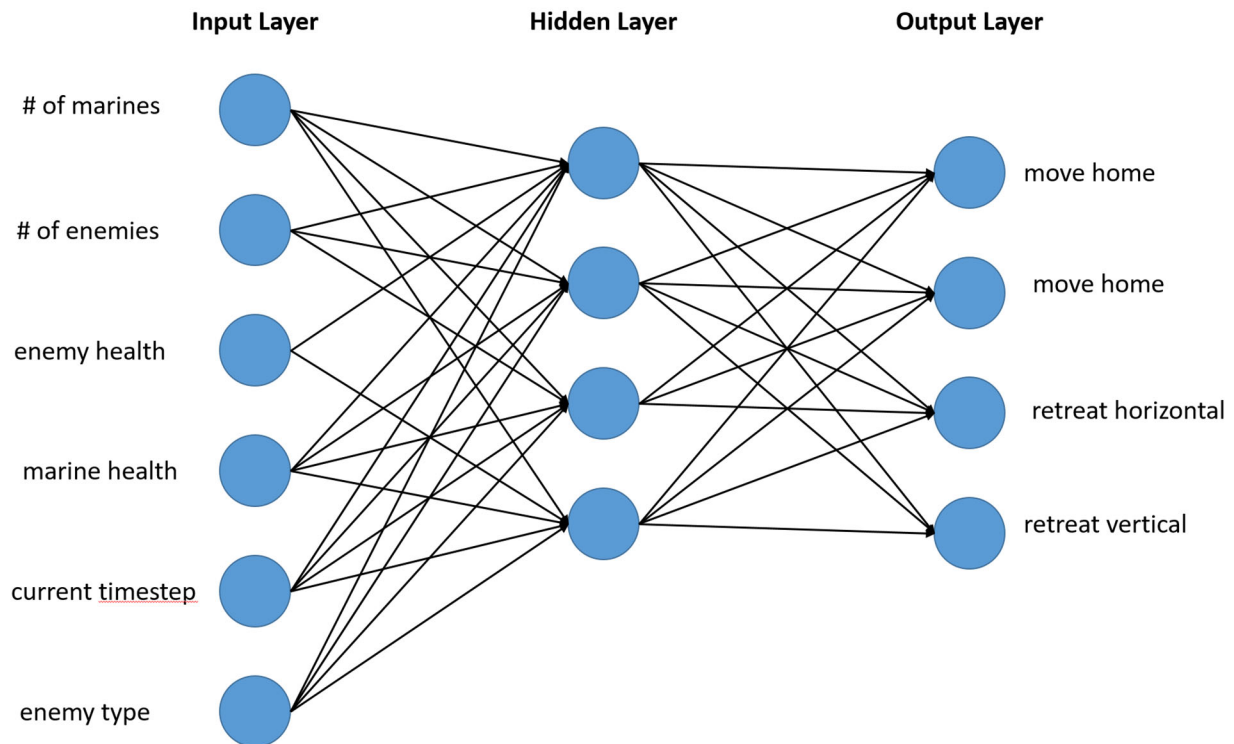


Figure 1: High-level diagram of Sequential Neural Network for Playing StarCraft II

Reporting (20 points)

Write a report that details the input, output, and hidden layers of the network you created. Include details on any pre-processing steps you took.

Write a short entry about each time you change the hyper-parameters or a configuration in your network. Did this increase or decrease your performance? Why do you think the performance of your network changed? What do you think you should try next to improve your network's performance.

Testing (20 points)

Ensure you have saved your best, trained model to your Github repository. We will import your trained model and run it against 5 randomly generated games. You will receive 4 points for each game that your model wins.

Survey (10 points)

Take the end of project survey before turning in your Final Project. We are constantly trying to improve this course, so we would like your honest feedback on how this project went. The Survey Monkey link provided is controlled by a third-party outside of the department, so your instructor will not be able to access your responses prior to the submission of final grades. The third-party will only notify the instructors of who has turned in a survey so we can count your 10 points.

Thanks and hope you enjoyed the course and project!

Grading Rubric

Expected Functionality	Points Allowed	Points Earned
Report	20	
Testing Performance	20	
Final Survey Complete	15	