Senior Design Self Assessment

Alex Turner

My contributions to the senior design project include the following: team and game environment planning, completion of deliverables including the slides, poster, and user guide, and test planning and execution. The fall semester included more of the planning, primarily deciding what teams would be good for an AI Agent to use and completing some of the assignments required of the group such as the presentation slides, user stories, and assistance with the design diagrams. The spring semester included test planning and execution, as well as completion of more deliverables such as the poster, the user guide, and a significant portion of the final presentation slides.

Last fall, I said that I wanted to try something new for this project, and a project with heavy reinforcement learning elements was definitely new and interesting to me. Though I wasn’t as involved with the technical side of things, it was still an enriching experience. I also learned how to build and use an Anaconda environment that was required for running our program. It was challenging at first, since at the time we needed to account for the users’ computer specs, but after a call with Eric who initially set it up, we were able to get it figured out.

Over the course of the last two semesters, the group was able to successfully create an AI agent that is capable of interfacing with the public API Pokémon Showdown using reinforcement learning methods. The group was also able to complete all of the required deliverables that included reports, slides, a user guide, a test plan and results, and a poster. About group work, I learned that it’s best to allow people to play to their strengths. I’m a big planner and a detail-oriented person, so I headed up most of the planning involved with the project and defining the game environment. Eric already had a background in machine learning, so he headed up the reinforcement learning side of things.

In hindsight, I wish I would’ve been more involved in the technical side of things. If time had allowed and I wasn’t juggling 3 other (rather difficult) classes and a part time job, I think I would’ve got more out of this project. I’d like to think that I pulled my share of the weight when it comes to this project, but I’d like to give a special shoutout to Eric for heading up the reinforcement learning side of things. He put a lot of work into it, and while Nick and I helped some, it was difficult since it was on his machine, so we had to either look over his shoulder or have him share his screen on Discord. Overall though, I think the project went well, and it’s something I’d be willing to put even more work into in the future.