Rebecca Salzer
Self Reflection: CMSC 500
IHRTLUHC

Self-Assigned Grade: A

Justification:

L1: Evolution as an Algorithm

- Attendance in Class - The first few weeks when we were learning a lot from the lectures in class, I made sure to attend every day unless I was sick or had a doctor's appointment. This was very important because we were learning about a topic (biology) that I haden't studied in awhile. Therefore attending class was important for me in developing a basis for understanding how evolution works and how it can be implemented as an algorithm.
- Class readings and Pursall comments (Evidence Included) - As part of developing this understanding of how an algorithm works I made sure to read all of the Pursall reading before class and consider them deeply. I left comments or asked questions when I wasn't sure about things or I found things interesting. This allowed me to engage deeper with the content and come to class prepared to learn. Once again since this was new content this helped me develop a basis for understanding how evolution works and how it can be implemented as an algorithm.
- Worked on C++ code in class (Evidence Included) - In the first few weeks of class we had multiple assignments where we developed evolutionary algorithms or made changes to existing evolutionary algorithms. I continually worked on these in class, asking questions of teachers and peers when necessary and also spent time outside of class trying to further comment and understand the code. This was critical in understanding how these algorithms work.

L2: Artificial Life as a Field

- Attendance in Class (Evidence Included) - I made sure to attend every day unless I was sick or had a doctor's appointment. This was very important because many of the overarching topics about AL were discussed continually in class. Therefore attending class was important for me in making sure I was listening and engaging in those conversations, making it so that I went from having almost no knowledge of AL, to having a good understanding of the trends and concerns in the field.
- Deep Readings For Papers In Group Discussion - As part of developing this understanding of the field of Artificial Life I made sure to read all of the Pursall readings that were assigned for class discussions before class before class and consider them

deeply. I left comments or asked questions when I wasn't sure about things or I found things interesting. This allowed me to engage deeper with the content and come to class prepared to learn. These group discussion readings helped me understand the field of AL in general, through understanding conversations in the field around ethics, next steps, and what fitness means. These class discussions and the readings that were required for them helped me understand what conversations are being had currently in the field.

- Hackathon (Evidence Included) - I participated in the hackathon, where we were given an evolutionary algorithm and had to implement a new component. I worked on getting the results at each generation to display and I also worked on tournament selection. This greatly helped me go from the more conceptual things that we had been discussing in class about how evolution can be simulated in algorithms, to actually implementing it and seeing how it works. Seeing how these algorithms actually worked made the field of AL come more into focus and allowed me to better understand what it actually means to simulate artificial life.

L3: Computational Collaboration

- MABE2 (Evidence Included) - When working on MABE2 in class I continually asked questions of students and the professor in class. There were times that I was confused about what some of the csv files were talking about, but I worked with and asked questions from other people who were working on different sections of the assignment to make sure that my visualizations were turning out okay. I also helped other students who were having trouble getting it set up and running initially.
- Github (Evidence Included) - A couple of times throughout the term, after working a lot with code, I would upload my code to github. This was to make sure that my progress was being saved and so that other people would be able to look back at my progress later on and understand the progression that I had made. Learning and understanding how to use github is critical for collaborative work so this was a very important thing that I learned how to do.
- Hackathon - Since I missed a day of class during the Hackathon I didn't wanna fall behind. So I made sure to discuss how to get started on the Hackathon and what the best steps to get started were. I had conversations with Aparna and Subin outside of class and that helped it so that I could get started and make progress before the next class. This was very beneficial in getting the assignment done on time.

L4: Failure

- Hackathon (Evidence Included) - During the hackathon I was struggling a lot at first, especially since I missed one of the days. I was having issues understanding and running the code. At first I didn't even know which files I should be editing and working

in. But after failing for multiple days I started to understand how the files and algorithm were set up and I was able to get at least the tournament selection completed by the end of the hackathon.
- MABE2 (Evidence Included) - I didn't get quite as far as I wanted with MABE2, I implemented the NK, the logic_9 and the Royal Road. There were other versions that were more complicated and that I wanted to go through and understand but I didn't end up having the time. Although I did a good job at visualizing multiple parts of the ones that I did decide to do, I wish I had been able to look into and visualize some of the more complicated versions.
- C++ Code (Evidence Included) - The first few weeks of class when we were working with building algorithms in c++ I struggled a lot. I hadn't worked in C++ in awhile and I was never super comfortable in it to begin with. There were many times that I was setting up my code incorrectly for how things are supposed to work in C++. During this time I was continually not getting things set up correctly by the end of class. However, I put the time in to look through and understand the solutions to the code that were posted so that I was continually learning and improving for future assignments. Over time I started doing better and was able to successfully implement the assignments.

L5: Reflection and Metacognition

- Self Evaluation and Bi-Weekly Meetings (Evidence Included) - I consistently completed the self evaluations every other week. I made sure to put time and thought into each evaluation and consider what I can be doing better to improve on my work. I showed up to each bi-weekly meeting on time with my self evaluations completed. I believe that each week I made an effort to make progress on the things I listed in the self-evaluations.
- Reading Perusall Comments (Evidence Included) - I always read other students Purusall comments and responses while completing my readings. In addition, I made sure that whenever I left a comment I would go back and check for responses either from the Professor or other students. This allowed me to reflect deeper on my initial questions and comments and consider others answers or points of view in preparation for the class discussions.
- Continued to discuss and think about class discussions outside of class - I found the big class discussions, focused on the four papers, to be very engaging and interesting. I continued to think about the questions and comments that students had posed in class. I also continued these conversations outside of class with students who are not in the CMSC field. These outside of class conversations allowed me to continue to reflect on the topics and build my ideas while also hearing perspectives from outsiders to the field. They were also simply fun and engaging conversations.