CS3610, Artificial Intelligence
Final Exam

Instructions:

- This exam is being given as a “take-home” (outside of class) exam. You may work on your responses at your convenience any time between the receipt of this exam and the start of the final exam period.
- If this exam were given as an “in class” exam you would have a time limit of ~110 minutes to answer the question(s). I will, ask that you honor the general length of that timeframe with this exam and spend approximately two hours working on this exam.
- I will ask you to word process and print your responses.
- You should submit a paper copy of your responses during the final exam period (10:00 AM - noon Monday, December 15th).
- This exam is open book, open notes, and open Internet. You may refer to any “published” source(s) of your choosing. However, use of any source for anything more than “reference” must be clearly documented in your answer.
- You are not allowed to discuss the exam with your classmates until you have submitted your exam.

Let’s revisit the very FIRST thing I asked you to discuss in this course. For HW0 I asked you respond to the question “How do you define artificial intelligence?” This was an opinion piece at the start of the semester. It is still an opinion question, but I think I can have higher expectations for the type of answer(s) that you include in your final exam response.

For your final “exam” I would like you to write a new answer to this question by addressing the following sub-questions/topics:

a. Provide a general answer to the question “How do you define artificial intelligence”

b. We studied four main units this semester – search, knowledge/reasoning, planning, and learning. Select two of these units, and specifically discuss how topics in these units fit into and affect your answer to part a.

c. You worked on a team to write a research paper on a topic of your selection. Discuss how the knowledge that you gained during that research affects your answers to part a.

d. Of all the AI issues that we discussed this semester in any capacity, which do you feel is still the most difficult to solve/perfect? Why? Which one, once solved/perfected, will advance the field the most? Why?

e. How good was your answer to HW 0? What did you say that was a good answer? What would you change? (If you do not have a copy of your HW0 please contact me and I can send you a copy (assuming that you submitted it electronically as requested back in August)).

This is both one question, and five questions. You should either write a single large essay that includes explicit references to all five sub-questions/topics, or you may choose to answer each sub-question separately. Either way, realize that your answer to this “single” question should accurately summarize a semester’s worth of learning. Each sub-question is worth 20 points with roughly 85% of those points being for content, while the remaining 15% will be assigned based on the overall clarity/writing quality of your answer(s).