**CSCE 625 S18**

**Project 1 Search: Brainstorming Report**

**Due by 2:20PM 2/6 as a PDF file submitted via eCAMPUS.**

Answer the questions below. The document must be typed 12pt Times New Roman font with 1” Margins and Header/Footer, 1.5 linespacing. The document must include the questions so that we can have the context for your answers.

1. What would you define as an AI search problem in wilderness search and rescue? There may be more than one possible application in WSAR, list as many as you can think of AND the assumptions about that problem specification. Think of each application at a software agent.
2. For each of the AI search problems in #1, describe the agent in terms of the P and E in PEAS.
   * P: Generate as many performance metrics as you can think of, then select two that are most promising.
   * E: describe the domain in terms of environmental dimensions: Observable, Deterministic, Episodic, Static, Discrete,Single-agent? and give your justification in two to three complete sentences
3. For each AI search problem in #1, discuss why or why not each of these categories of search is appropriate or not appropriate. You will need to refer back to the table and discussion in #2 as well as any other relevant factors that you think are important. For each category of search that is appropriate, suggest at least one specific technique and describe why it is a good choice. You will want to look through the book to see if any of the techniques we didn’t cover are applicable before.
4. Where else could AI (beyond AI search) be useful?

Grading Rubric:

Total of 20 points (or 20% of the Project 1 grade)

* 8pts Answers all the questions **thoughtfully** for at least one search agent
* 4pts Shows that they can apply PEAS to a real problem
* 4pts Shows understanding of all categories of search
* 4 pts Shows understanding of a specific search algorithm
* Notes:
  + NOT a group project, though it is fun to discuss in class work on your own on the writeup
  + There is NOT a single right answer- this is design
  + length is NOT a rubric, quality of thought and the comprehensible expression of the quality of that through is