

CSCE 990 Advanced Multiagent Systems

Final Project Assignment

Assigned: September 20, 2018

Due: December 12, 2018

(Project 5 minutes late will *not* be accepted)

Introduction

The goal of this final project is learn about intelligent agents or multiagent systems more comprehensively or in depth through a project-based study. The study can be empirical or theoretical studies or both, using a simulation or participating in a contest.

In this final project assignment, you will submit a proposal for your final project, run experiments, and submit a final project report on your design and results.

Experiments and Report

You are required to run an experiment with your agent design. You must propose a set of hypotheses that you want to validate. And then you must design a study that will allow you to collect the data that you need to validate or invalidate the hypotheses. It is likely that you will have many different environmental settings and different agent designs. Systematically evaluate them and report on the results. For your report, you must provide **POJI** of the results: Presentations, Observations, Justifications, and Implications. We will discuss this further in class.

Final Project Demo Day

On the Final Project Demo day, each team will present their agent design, results, and highlights and then demonstrate their software solution.

Team

You are allowed to work in a team or individually.

Important Dates

October 1: Tell me your **team members**.

October 16: A sufficiently detailed **proposal** that describes (1) the problem statement, (2) the solution design strategy, (3) the hypotheses, and (4) the experiments that you will likely conduct.

November 1-3: **Final Project Status Update Presentation (PPT)**

December 12: **Final Project Report** is due and **Demo Day!** (During the scheduled Final Time Slot: 3:30 – 5:30 PM)

Grading

The final project will be graded in 2 parts: programming (50%) and report (50%). The programming part will be graded based on: (a) 45% Program Correctness, (b) 15% Software Design, (c) 10% Programming Style, (d) 15% Testing, and (e) 15% Documentation.

The report will be graded based on: (a) 50% Design Description and Discussion, (b) 20% Organization, (c) 10% Requirements, (d) 10% Description of Simulation Experiments, and (d) 10% Grammar and Errors. The report must be written in a “manuscript format” compliant to AAAI, ACM, or IEEE. These manuscript formats can be found online at:

- AAAI: <http://www.aaai.org/Publications/Author/author.php>
- ACM: <http://www.acm.org/pubs/submissions/submission.htm>
- IEEE: <http://www.acm.org/pubs/submissions/submission.htm>