CS7637: Assignment 1 (Summer 2015)

Due: May 24th at 11:59PM UTC-12 (Anywhere on Earth time)
Complete **either** Assignment 1 **or** Assignment 2; do not complete both. Click here to submit your assignment.

Assignment: Addressing Raven's Progressive Matrices

Choose one (or more) of the following four topics covered in the course so far. In a response of roughly 1000 words, answer the question: how would you use this topic or skill to design an agent that can address Raven's Progressive Matrices?

- Semantic Networks
- Generate & Test
- Means-Ends Analysis
- Production Systems

1000 words is neither a minimum nor a maximum, but rather a rough guideline to the amount of thought needed to adequately answer the question. You may feel free to write more, or write less if you feel you can answer the question in less text. You are also free and encouraged to augment your description with pictures, diagrams, drawings, sample problems, or any other visual aid to support your answer.

The primary goal of this assignment is to help you plan out your agent for the first project. We hope the feedback you receive on this assignment will be helpful as you approach Project 1.

Submission

Assignment 1 should be submitted as a PDF. Most modern word processors allow you to save a document as a PDF. If yours does not, we recommend copying or uploading your assignment to Google Docs and downloading it as a PDF. There also exist other freely-available PDF converters online.

To submit Assignment 1, go to the assignment submission page, upload your document, and click submit. All submissions must be received by the due date and time. Late work will **not** be accepted, although we have built in a little lag time in T-Square to account for slow upload times. Please see the syllabus for more information on the course late policy.

Grading

Your assignment will be graded according to eight criteria. Each criteria will be evaluated on a scale of 0 to 5:

- How well does the assignment describe the problem it is attempting to solve?
- How well does the assignment identify what makes the problem difficult?
- How well does the assignment articulate its design for a solution to the problem?
- How well does the assignment leverage the chosen topic or topics in designing that solution?
- How well does the assignment explain how the chosen topic or topics address what makes the problem difficult?
- How well does the assignment expand on the description of the topic or topics that was presented in the lecture? In other words, how well does the assignment demonstrate understanding of the topic, not just repetition of its vocabulary?
- How well does the assignment supply enough depth and detail to be able to actually implement a system based on this idea?
- How well does the assignment actually solve the problem? Is the solution proposed by the assignment feasible?

Thus, assignments will be scored out of 40. It is important to note that a 90% should not be considered the threshold for an "A". Make sure to check the stats posts at the conclusion of each assignment to see the class distribution and understand your grade.

Peer Feedback

After each assignment, you'll be asked to give peer feedback to three other students in the class via Peer Feedback. You'll receive your peer review assignments the day after the assignment is due, and you'll have until the following Sunday to submit your peer feedback. Peer review is worth 15% of your grade, and your participation in peer review will be graded based both on completion of the activities and on the quality of your feedback, as judged by both the TAs and your peers.

You will receive three peer review assignments for *every* assignment, *whether you chose to complete that assignment or not*. So, make sure to complete peer review on all six assignments in the course, including the three that you yourself do not choose to do, as well as the three project reflections.