Course Project/Paper

Proposal due 10/24/17 (by Email)

Report/Paper due 12/8/17

The final course project/paper is worth 1/3 of your grade, so you should take it quite seriously. The ideal project would be to select some aspect of one of the evolutionary agent experiments that we’ve discussed in the lectures or paper readings and reproduce it, and then perhaps add your own small extension or modification. However, I will entertain proposals for other types of projects as well. If you would like, you could also undertake some simple analysis of an evolved agent. You may use the C++ code that I provided for your project, but you do not have to. For a paper, you should undertake a substantial review and analysis of some topic related to the course. For example, you could select a particular behavior and review and critically evaluate 3-5 attempts to evolve that behavior in the literature.

Proposal (Please submit by Email to rdbeer@indiana.edu)

Your proposal should describe the project or paper you wish to undertake in enough depth that I can evaluate its feasibility and appropriateness for the course. Thus, I expect your proposal to be at least a page in length (not counting references). It should include a clear statement of what you will be doing and the anticipated deliverables. For a project, it is often wise to organize your proposal as a sequence of steps, each of which builds upon the next. That way, if you run into difficulties with the ultimate goal, you will still have several earlier results to describe. Your proposal should also include a discussion of anticipated difficulties and a list of relevant references. Basically, you need to convince me that you’ve given your proposal some thought, you have a clear set of goals in mind, and you know how to proceed. If I am not convinced, I may ask you to submit a revised proposal.

Project Report

Turn in a hardcopy of your report containing the following

1. An introduction section giving a brief overview of your project
2. A model section describing the model and experimental setup for your project
3. A results section for each of your major results. Each results section should contain
   a. A description of the work performed
   b. Graphical depictions of the results obtained. Each figure should have a figure number and a caption, and be referenced from the main text
   c. A detailed explanation of the result and a discussion of its significance
4. An overall discussion and conclusion section for the entire project
5. A bibliography for all the references given in the main text
6. Commented listing of all source code that you wrote for the project

Paper

Turn in a hardcopy of your paper. The internal divisions are up to you, but you should at least have an introductory section that lays out the topic and goals of your paper and a final section that summarizes your conclusions. In addition, you should have a good bibliography of the papers that you drew on in the preparation of your paper, with references (as well as any figures that you include) cited in the main text. Your paper should represent work equivalent to that done in carrying out and writing up a project. A minimum of 15 pages (not including references) is probably a reasonable target.