CS-6700 Advanced Artificial Intelligence Spring 2018

Project Proposals — Research / Coding

Due Date: Fri., March, 23rd, 5pm. Email a pdf version to selman@cs.cornell.edu. Use in subject line of email: CS-6700 Project Proposal.

Format: The proposal should contain five components:

- 1. A title with your name(s) and netids.
- 2. A clear, concise description of what you plan to do.
- 3. The general approach you'll use (e.g., deep learning, neural nets, heuristic search, game tree search, or inference).
- 4. An explicit, coherent plan for a quantitative and/or qualitative evaluation of your approach and system.
- 5. A time line for your implementation and evaluation.

The proposal should not be more than about **two pages** in length.

Proposals can be modified for content in response to my comments/suggestions.

NOTE:

- 1. For projects ideas, see the CS-6700 web page.
- 2. For the **final evaluation**, I will have a brief meeting with each group. Time slots during exam week. You will need to present your project with a **powerpoint (about 10 to 15 slides)** and a brief **demo of your software** (if applicable). You will also need to hand in a **write-up** on the project (**between 10 and 15 pages**). The write-up should include a clear description of the overall goals of the project, the software written, and the results an evaluation of your system with **various observations on the AI components and their performance**. For the latter aspect, you should think about ways to study your system. For example, in a project on game playing, you should have your program play itself or variations of itself. You can evaluate how well various heuristics perform and the effect of increasing search depth. In a learning related project, you can consider the effect of training data size and the complexity of the learned concept or neural net. Don't hesitate to drop me an email if you have questions about these issues.