

**Rubric:**

- **(35 points)** Prepare a lecture on some interesting topics that we haven't covered in class (or even a different aspect of a topic we've covered in class). Some ways to accomplish this:
  - PowerPoint lecture
  - A Jim / Andrew / Paul – style lecture (on the whiteboard). I would like you to submit some notes (so I can see that you planned it out a bit)<sup>1</sup>
  - Images from websites
  - Videos (although don't let the video do all the talking for you)
- [Bonus points for a working prototype (at least a portion of which you developed)]
- *As soon as you have a topic, let Jason know and schedule a time to present*

**This lecture should be as close as possible to 15 minutes.**

- **(15 points)** Be able to intelligently answer questions (for about 5 – 10 minutes)
- **(50 points)** Following along with every other student lecture and ask some questions (you don't have to ask something for every lecture – just a few)

**Possible Ideas for presentation:**

- Other Neural Networks:
  - Bayes Networks
  - Recurrent Networks
- Self-driving Vehicles
- PlayFun algorithm
- ~~Deep Dream~~
- Chess Algorithms
- ~~An intro to Prolog~~ (a propositional calculus programming language)
- Constraint-based problem solving
- Procedural-generation algorithms (is that a stretch calling it AI?)
- Speech Recognition
- ~~Natural Language Processing~~
- Probability-based algorithms:
  - ~~Markov processes~~
  - Hidden Markov Models (if we don't cover it in class)
  - Fuzzy-Logic
- Selected game AI (find documentation [not opinion-based forums]) on the AI algorithms used in a particular game)
- Unit-coordinate in RTS's
- Any Computer Vision algorithm (you may want to look at OpenCV)
- Classic game-playing algorithms (e.g. Alpha-Beta pruning) [if we don't cover it in class]
- The history of AI (discuss major personalities in AI)

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<sup>1</sup> Beware, though: “winging” a presentation is hard for most people!