Final Project Proposal Rubric

COCS 4550/5550
Intro to AI
Fall 2017

You're made it this far in the semester, congratulations! Now you're ready to get your hands dirty and make your own scientific AI project! This project proposal is a way for you to start brainstorming ideas and to put something concrete down on paper for yourself (and for me) to reference later on. It's also a great way for you to get feedback on the scope of your idea – to make sure that it's sufficient to get a good grade in the class, but also (importantly!) to make sure that it's achievable in only 6 weeks time. Your proposal should briefly and succinctly cover roughly the set of the topics mentioned below, and be approximately one page in length (and no more than two pages – not including images or references, if you choose to include any). Please email this as a pdf to me (`ncheney@uwyo.edu`) by 11:59pm on 10/27 with the subject line: "*yourFirstName_yourLastName_COCSyourClassNumber_ProjectProposal*"

Motivation – Why did you choose to work on this problem? Do you have some specific connection to this method or application? Is there something fun or useful that you can do with this once you're done? Why do you care about it (and why should I care)?

Methods 1 (Application) – Tell me a little bit about the application domain. If it's something I may not have heard of before, try and tell me what it is or how it works (succinctly! – a picture is worth a thousand words here).

Methods 2 (AI Algorithm) – What AI/ML methods are you proposing to solve this problem? Be specific if you can. Why might this algorithm be a good fit for your problem domain?

Expected Results 1 (Trivial Goals) – The biggest risk of this whole endeavor is taking on more than you can handle in 6 weeks. What is a simple first step (or naive version of this algorithm/problem) that is so simple you are 100% sure that you'll be able to finish it?

Expected Results 2 (Realistic Goals) – But 6 weeks is a reasonable amount of time (since you'll be starting early and working through the entire window... not saving it all for the night before!), so you should be able to get done a reasonably impressive feat. Assuming that things went reasonably well (with some decent-sized hiccups along the way), what – specifically – do you expect to have achieved by the end of the semester.

Expected Results 3 (Stretch Goals) – With any interesting problem there are probably hundreds of other things you could try, other features you could implement, or other approaches you could take. What are the next future directions you would like to take after this project (that you don't expect to have time for – but that might actually be able to achieve if the hiccups along the way were just tiny ones)?

Challenges – Specifically noting the problems that might occur, what are some that you expect to come up? This will help us both to start thinking ahead for if (or when) they come up.