**Artificial Intelligence**

**Final Project Description**

The first project milestone is **Oct 6th.** Project proposals will be discussed in class on this date. Please choose a project topic that is of interest to you. Some examples follow, but do not limit yourself to these. If there is a particular hobby or interest you have (ex. a game or club, computer networking, etc.) try to turn it into a project.

Sample projects:

* chess, checkers, or go
* AI player for a Real Time Strategy or First Person Shooter computer game
* play in a poker game with human opponent(s)
* email filtering
* learn a customer's preferences and make book (or movie) recommendations based on them (Netflix dataset available)
* finding good approximate solutions to the traveling salesman problem
* symbolic integration of mathematical functions
* prove mathematical theorems
* teaching some subject, such as algebra, to a child
* composing original music
* understanding spoken language
* image recognition
* machine translation from one language to another
* give advice for stock market investments
* doing more intelligent Web or database searches
* model adaptation and evolutionary change (physics, biology, geology)

On Oct 6th you will present your idea to the class (3-5 minute presentations) and submit a project proposal to me (via canvas). Submit both a written proposal and your ppt (or similar) presentation.

The following information should be included in the project description document

* A high level overview of the project (1/2 – 1 page)
* A list of references that might be useful as you prepare begin the project research (~5-7 references)
* An explanation of the learning required (1/2 page)
* An initial algorithm (or suggestion technique) for pursuing the project (1/2 - 1 page)
* High level functional requirements

The presentation should be done in PPT (or similar tool) and should contain 5 slides, as follows

Slide 1: Project name

Slide 2: Project overview

Slide 3: Functional requirements

Slide 4: Learning aspects

Slide 5: Techniques to be employed

Your ppt should be visually interesting (i.e. NOT 5 slides of tightly packed text copied and pasted from your document)

This deliverable will count as 5% of your final project grade!