# **Final Assignment: It's Up To You**

What concepts or methods from the machine learning field interest you the most? This assignment is your chance to explore these interests, by

* reading at least five papers from the research literature and summarizing them,
* modifying algorithms used in class and applying them to new problems,
* learning about, implementing, and applying an algorithm not studied during the course, or
* duplicating a result reported in a publication.

You may work by yourself or in teams of up to four members. A two member team will be expected to invest twice the effort of one person, a three member team must invest three times the effort, etc. Teamwork is strongly encouraged; you can learn much from the interaction.

You or your team must submit one written report. Clearly define what the responsibility of each team member was in a subsection of your report.

Your team must also present a poster at the CS545 poster session to be held one evening during the last week of regular class meetings.

## Requirements

### **Proposal**

Submit via RamCT a three to four page proposal describing

* the machine learning concept or method that you find interesting,
* the steps you will take to investigate it,
* who is on your team,
* what each team member will do, and
* a list of at least four key steps your team will complete and the dates by when they will be completed.

Only one person from your team should submit the proposal to RamCT. All team members will get the same grade on the proposal.

### **Written Report**

Submit via RamCT the PDF file of your written report by the due date. Remember, your report must clearly describe what each team member did and must reflect a level of effort directly related to the number of members on your team.

Only one person from your team should submit the final report to RamCT. Team members will be graded according to the quality of the overall report and their effort on the project, so be sure to clearly define the efforts of each team member.

### **Poster Presentation**

This is only for students in the on-campus section. Distance-learning students are very welcome to present a poster if convenient.

## Grading

Here is what the grade sheet will look like for this assignment.

CS545: Final Assignment Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Grade: \_\_\_ out of 100 points

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Proposal: 10 points

(2 points): Good introduction and motivation for project.

(4 points): Clear plan.

(4 points): Clear team member responsibilities.

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Presentation: 20 points (only for on-campus students)

( 5 points): Quality of poster. Good layout; easy to see the reading flow.

( 5 points); Includes introduction, method, and results, including plots.

(10 points): Understandable without much explanation.

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Written Report: 70 points (90 points for distance-learning students who do not present posters)

(10 points): Good introduction and motivation for project.

(10 points): Clear description of the team did and how you did it.

(10 points): Good results and observations.

(10 points): Spelling, grammar, organization.

(30 points): Your personal effort and results for the team, as explained in a

subsection with a title that is your name.