Final Paper and Presentation
Due Thursday, Jan. 26, 2023

Winter studies courses at Williams have a requirement of a final assignment equivalent to a 10 page paper. For this course, we are asking you to write a 5 page paper and give a 10-15 minute presentation on the final day of class (Jan. 26) to meet this requirement.

Collaboration:
You are welcome to work in groups of up to 3 students to complete this assignment. The expectation is that both students will contribute equally to the content in the paper, the writing of the paper, the preparation of the final presentation, and the final presentation.

Content:
In this project, you are exploring a research problem in depth. Your final paper and presentation should contain the following sections:

1.) Research context and problem statement
- What is the context for the problem you're investigating? Why do people care about this problem and its solutions? What is the specific problem you propose investigating? Make sure to include citations for at least 5 papers that support your argument.

2.) Description of the proposed solution or approach
- Describe the limitations of past work that do not solve the specific problem you're interested in. What insight, new knowledge, or tools do you intend to leverage in order to solve this currently unsolved problem? Describe how you to intend to approach this problem in a new way to gain greater insight into the currently unsolved problem.

3.) Proposed evaluation and implementation plan
- Describe your experimental design for determining whether your approach is successful. What tools or input sets will you use? What experiments do you propose doing to assess the effectiveness of your proposed approach? What metric(s) will you use to evaluate success?

Paper Details:
1. Your 5 page paper must be written in LaTeX using the following commands to format your document:

```
\documentclass[11pt]{article}
\usepackage[margin=1in]{geometry}
\usepackage{setspace} \doublespacing
\bibliographystyle{acm}
```

2. Your paper should have the three sections described above in the Content section.
3. Your paper should have at least 5 paper citations, with one being your seed paper that started your investigation into this topic.

Presentation:
During our last class meeting time on Thursday, January 26, 2023, you will give a 10-15 minute presentation on the content of your research paper. Your presentation should include slides. You are welcome to use brief video snippets in your presentation if they are relevant to the topic being explored. Please contact the instructor if you wish to use other resources during your presentation.

Submission Details:

Your final submissions should be sent to the instructor via email (kas10@williams.edu) by Thursday, January 26, 2023, at 11:59pm. Your email should include the following files:

- A PDF file of your 5 page final paper
- All LaTeX files used to create your 5 page final paper
- All BibTeX files used to create the bibliography in your 5 page final paper
- The slides used for your in-class presentation