Final Project – 60% of course grade (60 points/100 total course points)

SI 699 Big Data Analytics

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This spec covers the last three most significant parts of your final project:

- Poster Presentation and 5-7 min. Video:
 Posters due by April 12 (earlier deadline for printing is >48 hours)
 Videos due by April 11, Total: 10%
 (Note: any group missing either a poster or video will receive 0% for this part)
- Final Papers April 15, 35%
- (Optional but HIGHLY recommended UMSI poster fair: Monday, April 17)

Class Final Poster Fair and Presentation: April 12. Public video presentations and poster fair: 4:30-6pm, Ehrlicher Room with food, drinks, and prizes! Please invite your friends.

A reminder that these are additional components of your final project grade (two of which are already completed or soon to be)

- Project Ideas Presentation Feb 22 (already completed), 5%
- Class Check in Presentation March 22 (already completed), 5%
- Individual Group Meetings with me each class until April 5, 5%

Learning Objectives: These last three parts of your final project are the most important elements of your capstone. They also represent the most common and important skills researchers should learn when presenting their work: the academic poster, a video presentation, and a final paper.

Assignment Timeline Overview:

There are three important deadlines to keep in mind. The first item that will likely be finished first is your poster. Because this is due printed in class by April 12, 4pm, you should have it completed a few days before. The poster does not need to have all of the same results as your final paper, as you will likely have about a week between when the poster is due and when the paper is due, to be able to update your results or use feedback from the presentation and poster fair in your final paper. Your video will be due April 11, 11:59pm the night before our class's poster fair. Your final papers will be due April 15, 11:59pm uploaded into Canvas.

Detailed Instructions:

One thing to keep in mind is that all three assignments are just different formats to convey very similar information. To help you see this, note that each one should cover each of these in some way – hopefully you realize that this is the exact template we have been using since the start of class to understand research papers and projects.

- Title and Names
- Project Motivation
- Previous literature
- Question(s)
- Method
- Results
- Discussion/Conclusion

You can of course add sub-sections into this and adapt this format accordingly to suit your needs. But if you think of each of these three assignments having a very similar section structure, this will help your final submissions.

Presentation Videos due by April 11, (Total combined with Poster: 10%):

You are responsible for a 5-6 minute long video that covers the above topics. It is suggested that you use Zoom to record the video, but you can also use other ways of creating/recording videos as well. Just make sure that it can play with most video playing programs (i.e., Quicktime), and it is no longer than 7 minutes (the suggested time is 5-6 minutes, but you can go up to 7 if needed). Please upload into Canvas or if there is a size issue, you can e-mail or upload a link to download. Each person in the group must say at least one sentence in the video presentation.

Posters due in class by 4pm, April 12, (Total combined with Poster: 10%):

There should be one person already in each group responsible for printing the poster. **Posters should be in color and must be sized at 30" x 40" (horizontal orientation).** For printing, you should use the Sites Consulting staff rather than printing it yourselves, by submitting your <u>poster request here</u>. They should already have the uniquename of the designated person in your group and mention that it is for SI699, Big Data Analytics and they should have a shortcode already given to them by Jacques Chestnut, School of Information.

Please note, you will need to be on MWireless, a campus computer, or using the UM VPN to reach that page. There is no additional cost to having Consultants print it on your behalf, and Consultants are very familiar with the printing process, so they can ensure the posters come out properly and on time if you let them know when you need the poster in hand for pick up for class.

If you have never done a poster before, you can find various guidelines and suggestions using a google search of "academic poster examples" and find great tutorials at sites like here and here. But be creative, be concise but informative, and overall, make sure that the poster is visually appealing (perhaps with related images, graphs, charts, etc.) and well designed. As a student you have access to Adobe design software (Photoshop, InDesign) that may help you format the poster.

Papers uploaded on Canvas by 11:59pm, April 15, (35%):

Your final paper should have the look and presentation of a data science paper that you might submit to a computer science conference and journal. To achieve this, you should format your paper using Latex and collaborate as a team together on Overleaf.

You may choose any computer science conference/journal template that you would like and you think helps showcase your findings the best. Some formats do not have columns for text, others have 2 columns. You can choose either.

Here are some sample templates, each one has a sample that you can import directly into Overleaf to help with your formatting (you may use others that CS conferences or ACM uses as well):

 $\frac{https://www.overleaf.com/latex/templates/association-for-computing-machinery-acm-sig-proceedings-template/bmvfhcdnxfty$

 $\frac{https://www.overleaf.com/latex/templates/acm-conference-proceedings-primary-article-template/wbvnghjbzwpc$

https://www.acm.org/publications/authors/submissions

There is no length requirement, as long as you are able to properly motivate your research paper and detail your methods and findings. It should be just a slightly shorter version of the simpler data science papers we have read in class. If any sections feel particularly "thin," compared to samples we have read in class, you should perhaps think about how to add something there.

Grading Rubric:

As these are final project submissions and relate closely to your final grade, the assignments will be graded more wholistically based on how close they come to having the look and feel of actual data science conference submissions. Projects that reach that standard will be "A" level projects (or even A+ projects), and ones that come short of that will be marked down accordingly.