MET CS 677 Project Guidelines (Online Class)

One of the requirements for MET CS 677 is the final project (15% of the grade). The project must be done individually. This is an opportunity for you to be creative in solving a data science problem that is of interest to you. The project should be challenging enough so that you could discuss it at future interviews with potential employers. Your project will also give us an opportunity to provide you with a future reference if you ever need it.

For the online class, you will have to record your (3-to-5 minutes) presentation of your results using Kaltura video (similar to youtube). Then share the project presentation video at the "Media Gallery" section.

How to record a video and share at the "Media Gallery" section?
- Check out the direction to use Kaltura to capture and post or submit video.
- Inside the Kaltura direction, under the section of "Posting or Submitting Your Video in Your Course", follow the steps under "B. For sharing a video in the Media Gallery area".

In addition to presentations, you will submit the following:
1. one-to-two-page summary of what you have done and what were the main results
2. source file(s)
3. instructions how to run your code

The presentations should be at the level that other students can understand what your project is all about. Imagine that you have an interview and you are asked to describe in a few words a data science project of your choice.

You are free to choose any topic that is of interest to you. The most important thing to keep in mind that this is a data science/machine learning project in Python. You will not be judged on the originality of your topic but the implementation should be, at minimum, on par with what is covered in the course. We want you to show us that you can analyze a data science problem and write a short summary of your results.

You are also free to pick up a data science/machine learning method and highly encouraged to use any additional library that was not covered or used in class (e.g. deep learning or recommendation systems).

In short, this is an opportunity for you to explore data science and do something that is of interest to you. We are asking you to send us your 1-2 sentence proposals so that we could assess if your project may be too difficult.

Finally, your project should contain no confidential data from your employer or any non-public data source.

See below for Project Rubric and general expectations. Good Luck!

General Project Rubric

1. Technical correctness - grades from A to F

   A: Correct, complete, and thorough technical justification

   F: No justification of correctness

2. Clarity in presentation of project - grades from A to F

   A: Entirely clear and coherent

   F: Unclear or no presentation

3. Understanding of the relevant technologies - grades from A to F

   A: Evidence throughout of thorough understanding. Goes deep in analysis and uses that for final conclusion

   F: Minor understanding evidenced, analysis not conclusive.

4. Use of resources - material, textbook, others - grades from A to F

   A: Excellent, wide set of resources used very effectively - textbooks, online materials/papers, class materials, or others.

   F: Unclear or no resources used

5. Use of approaches and algorithms learned in the course - grades from A to F

   A: Many complementary algorithms are used and compared, and maybe (not necessarily required) a new algorithm not covered in the course also explored.

   F: None of the analysis is based on the algorithms covered in the course or new algorithms