GUIDELINES FOR FINAL PROJECT SUBMISSION

Each group should submit one recorded video and one brief paper. The video and paper will have roughly equal weight on the group's final score.

VIDEO: Videos should be uploaded to YouTube and be 10 minutes max. The videos may show slides while the presenter speaks or, if you want, they can show the speaker and the slides as long as the slides are readable when viewed on a reasonable screen -- please preview your videos to ensure readability and audibility. If you choose to just show the slides, please indicate in some manner (either with text on the slide or by introducing yourself at the beginning of your part) who is speaking. Please ensure that every project member has some speaking part in the presentation, ideally related to their individual contribution.

PAPER: Papers should be 5 pages max. The goal of the paper is to provide a more technical description of your project. Your paper should include figures that illustrate your dataset, your approach, and your results. Please do not include code in your paper. **Please ensure that every project member contributes to some part of the written document, ideally related to their contribution.**

Components of VIDEO and PAPER:

Both your video and paper should have the following components:

- Introduction and Motivation: What were you trying to do and WHY? For full points clearly state the problem and why it is important. (approx. 2 out of 25 points)
- **Related work:** Mention any related work from our class readings or from other literature. If possible, also mention a recent paper in the literature that addresses this problem (or if there is nothing like it in the literature, make the case for why your problem is unique). (approx. 2 out of 25 points)
- **Methods:** What did you do? Be as precise as you can. For full credit there should be enough detail for someone relatively skilled to replicate your work. (approx. 7 out of 25 points)
- **Results:** What did you discover? How well did it work? As this is a class project, it is likely that many things did not work as well as planned. For this project, detailing what went wrong is as important as describing what went well. (approx. 7 out of 25 points)
- Discussion: What did you learn? What could you do better? What would you have done
 next if you had more time? Why do you think it didn't work if it didn't? If everything
 worked perfectly, what next steps would you suggest for follow-up work. For full credit
 discuss two extensions or improvements to your project with short justifications for why

you think that would work better (improvements) or why they are promising extensions. (approx. 7 out of 25 points)

In addition to these, the PAPER (but not the video) should include two additional sections:

- **Contributions**: What task was assigned to each member, and what did each member actually do in the end?
- **Code**: A link to a GitHub repository, containing all of the code produced in the project, should be included in the paper. This code should be sufficient to reproduce all of the results of the paper.
- References: A list of references (books, papers, blog posts, etc.) used in the development of the project.

NOTE ON PLAGIARISM

You are free to use any third-party ideas or codes that you wish as long as it is a publicly available resource. You should clearly specify in your paper and video submissions which code was developed from scratch and which was downloaded from public sources. In line with the course and University policy, deliberately using someone else's words and/or code without crediting the source is **plagiarism** and will result in a grade of zero.

GRADING CONSIDERATIONS

All projects with good effort will receive good grades. It is not necessary to have a working successful algorithm or demo. The most important thing is to demonstrate what you learned and that you thought about the problems and issues even if you couldn't solve them all. (Note you can ask us questions to help with this deep thinking also -- through Campuswire or by emailing for a meeting)

Here's what we expect to see in both your paper and video:

- 1) Do you know why you are doing the project?
- 2) Can you relate it to work from the class?
- 3) How hard was what you did/tried to do?

(here we recognize that some projects were hard just to get the data recorded in useable form, whereas for others that is not an issue)

- 4) What did you learn?
- 5) How much work did you do?

 (also here we recognize that some projects were hard just to get/clean the data)
- 6) Can you clearly present the motivation and what you did/tried to do to the class?
- 7) Did you get something to work (this is a bonus -- not required)?
- 8) Did you think deeply about the results or about problems with the algorithm? (i.e. Did you do

more than just run an algorithm - but did you do a sanity check that the data/algorithm is as you expected/reasonable....)

- 10) Are you aware of the strengths and limitations of your approach/algorithm?
- 11) How much do you understand about the problem, algorithm, and/or approach?
- 12) In general, the group will receive the same grade unless the individual contribution reports reveal that this would not be appropriate.

SEEKING SUPPORT

Each project will be assigned an advisor, who will ensure the feasibility and appropriateness of the group's project. If a group experiences severe work imbalance (e.g., one or more group members does not contribute to the project), and such imbalance is causing problems and cannot be mitigated internally, the group may reach out to their advisor for support.