

## Final Project

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**Instructions:** The final project consists of a recorded presentation video and a written report to go along with your code. **Each team should submit just one set of project materials!** Details for what is expected for each component are as follows:

### Project Presentation - Due Monday 5/1

- Presentations should be submitted as a recorded video of length 4–5 minutes.
- The video should include a slideshow presentation with one or more team members doing a voice over. Note: if you want to show visuals that are not in slide format, this is okay.
- You may submit your video as a MPG or MP4 file in Collab, or if you prefer, you may upload it to YouTube and submit a link to the video.
- You may use whatever software you are comfortable with to record the video. One option is to start a Zoom meeting with the presenter as the only participant and set it to output a recording.
- Be sure to clearly state what problem you set out to solve. How did you implement it? What experiments did you run on what data? What challenges did you face? What conclusions did you make?

### Project Report And Code - Due Tuesday 5/2

You should submit a written report along with all of the code you produced to implement your project. If your code uses external data, please provide a link to that data (if publicly available) or include an example data set. If providing the data you used is not feasible for whatever reason, you must speak to the professor before submitting and explain why. The written report may be within a Jupyter notebook that also contains all of the code, or it may be a separate document from the code. Please only use (\*.ipynb, \*.html, \*.docx, or \*.pdf formats only). Make sure to include the following in your written report:

1. List the names and computing IDs for everyone on your team.
2. Describe the DSP method that you researched and implemented. Include equations and algorithms as appropriate.
3. If you have input data signals that you are using, briefly describe them. Document where you got the data (from a website, collected yourself, etc.)
4. Present the results of your experiments with appropriate figures, tables, audio demonstrations, etc. Be sure to write clearly your analysis of the results and the conclusions you make from them.
5. Describe the challenges that you faced when implementing the project. If you tried ideas that **did not** make it into your final project, you should document them also. All the hard work you put into the project will be taken into account in grading!
6. Reference any sources (webpages, papers, books, etc.) that you used to research your project idea.
7. Explain what work each team member performed to complete the project.