

ECEN 4493/5080

Midterm Project

April 16, 2025

Given the research findings you have engaged in your Midterm Project, “Final Project” focus on one specific research problem/issue and implement the code for a target utility. Your final project does not have to be built from scratch and can utilize publicly available code and models. However, your final project will need to make some significant change or new contribution to the publicly available source that you use. Your Final Project deliverables include:

1. a PowerPoint presentation consisting of 5 to 10 slides and a 10 minute video (in mp4 format) of you presenting these slides (make sure you are visible in your video).
2. The code for your project.
3. a short demo of your project at the end of your video presentation.

PowerPoint:

- An overview of your project including a problem statement which highlights the background and known methodologies related to your topic.
- Methodology details for your solution
- Testing procedures and results used to verify your project results
- conclusion
- citations

Code:

- a link to a repository, a colab project, or a zipped folder which includes the code you wrote for your contribution to this project. (If you did not write new code but instead retrained a model with new data, make sure you include links to the model you used and the data you used.)
- links to code and models you used in this project that you did not write
- links to any data used to train your model (including data you produced yourself. If you are having trouble including data you produced yourself, you may share it with me over a onedrive folder).

Demo:

- a short demo showing the performance of your project on test data (not training data) at the end of your 10 minute video.
- Do not include video of the model training or running your entire test set. Use just one test example
- make sure we can visualize any pertinent parts of your project (e.g. a result image with a bounding box around the object you are localizing)

Some resources for recording a video of your presentation:

- Use a laptop with a mic and camera with remote meeting software (zoom, teams, etc.). You can start a meeting with no one in it, share your screen so that your slides will be recorded, and select record in the software.
- Zoom and Teams will record to an mp4 format, but if you need to convert your recording for any reason I suggest <https://handbrake.fr/>
- If you feel you need to edit your video or audio I suggest the following:
 - video - <https://kdenlive.org/en/>
 - audio - <https://www.audacityteam.org/>

Due Date:

- Friday May 9