

ECE 5470 Project 10-point checklist

1. What is the project?

--- A **precise** description of what is the goal or endpoint of the project

2. What has already been done or claimed to have been done for this project?

---- A careful literature review. There is no excuse for ignorance of your chosen area. A very good strategy is to replicate an already published algorithm **and evaluation methodology**. (You can always add your fancy innovations at the end of the project if you are on schedule).

3. How will I know that my program is working as intended?

How can I verify the correct operation?

--- Typically a test with one or two small (synthetic) test images with precisely known outcomes.

4. How can I demonstrate the concept of my advanced algorithm?

Create a simple (synthetic) test image that clearly shows an improved outcome when compared to a simple naïve baseline method.

5. How will I demonstrate that my claimed algorithm is an improvement over standard naive methods?

Frist implement a “simple” standard method and use this to validate your experiment and to establish baseline outcomes

6. What data set will I use to evaluate the algorithm (training set and test set)?

7. How will this data set be documented (have the correct outcomes pre-established)?

8. What is the evaluation metric?

How will I know that one algorithm is better than another? --- a single number

9. What is the evaluation experiment? How will the results be presented (graphs rather than pictures)?

10. How will I optimize the algorithm’s settings and parameters through multiple executions of the experiment?