

CSC 580 HOMEWORK 4

Due: 11/30 (Thurs)

Instructions:

- If you use math symbols, please define it clearly before you use it (unless they are standard from the lecture).
- You must provide the derivation for obtaining the answer and full source code for whatever problem you use programming. Please email your source codes to csc480580@gmail.com.
- Please use the problem & subproblem numbering of this document; do not recreate or renumber them.
- Submit your homework on time to gradescope. NO LATE DAYS, NO LATE SUBMISSIONS ACCEPTED.
- The submission must be one single PDF file (use Acrobat Pro from the UA software library if you need to merge multiple PDFs).
- Please include your answers to all questions in your submission to Gradescope. (Do not store your answers in your source codes or Jupyter notebooks - I will not look at them by default.)
 - You can use word processing software like Microsoft Word or LaTeX.
 - You can also hand-write your answers and then scan it. If you use your phone camera, I recommend using TurboScan (smartphone app) or similar ones to avoid looking slanted or showing the background.
 - Watch the video and follow the instruction: https://youtu.be/KMPoby5g_nE .
- Collaboration policy: do not discuss answers with your classmates. You can discuss HW for the clarification or any math/programming issues at a high-level.

Problem 1: Project update.

Use this opportunity to continue making progress on your project. Give brief updates on the project for the following:

- What progress have you made so far? (share any preliminary results)
- What difficulties have you encountered or that you anticipate?
- What remains to be done? List all your todo items and give your deadline for each of them. Make sure you allocate time for writing up the project report.