

CS550: Massive Data Mining and Learning

Homework 3

Due 11:59pm Monday, Apr 18, 2022

Submission Instructions

Assignment Submission Include a signed agreement to the Honor Code with this assignment. Assignments are due at 11:59pm. Students should submit their homework via Canvas. Students can typeset or scan their homework. Students also need to include their code in the final submission zip file. Put all the code for a single question into a single file. Finally, put your PDF answer file and all the code files in a folder named as your Name and NetID (i.e., Firstname-Lastname-NetID.pdf), compress the folder as a zip file (e.g., Firstname-Lastname-NetID.zip), and submit the zip file via Canvas.

Late Policy: The homework is due on 4/18 (Monday) at 11:59pm. We will release the solutions of the homework on Canvas on 4/22 (Friday) 11:59pm. If your homework is submitted to Canvas before 4/18 11:59pm, there will no late penalty. If you submit to Canvas after 4/18 11:59pm and before 4/22 11:59pm, your score will be penalized by 0.9^k , where k is the number of days of late submission. For example, if you submitted on 4/21, and your original score is 80, then your final score will be $80 \times 0.9^3 = 58.32$ for $22 - 18 = 3$ days of late submission. If you submit to Canvas after 4/22 11:59pm, then you will earn no score for the homework.

Honor Code Students may discuss homework problems with peers. However, each student must write down their solutions independently to show they understand the solution well enough in order to reconstruct it by themselves. Students should clearly mention the names of all the other students with whom they discussed the homework. Directly using code or solutions obtained from others or from the web is considered an honor code violation. We check all the submissions for plagiarism. We take the honor code seriously and expect students to do the same.

Discussion Group (People with whom you discussed ideas used in your answers):

On-line or hardcopy documents used as part of your answers:

I acknowledge and accept the Honor Code.

(Signed)_____

If you are not printing this document out, please type your initials above.

Answer to Question 1(a)

Answer to Question 1(b)

Answer to Question 1(c)

Answer to Question 2(a)

Answer to Question 2(b)

Answer to Question 2(c)

Answer to Question 3(a)

Answer to Question 3(b)

Answer to Question 3(c)