Math2270, Fall 2019
Instructor: Kelly MacArthur
Extra Credit Assignment

Doing this optional extra credit (EC) assignment will potentially add 5 percentage points to your final exam score for the class. This assignment will be graded for correctness.

Due date: Friday, December 13, 2019 by 11:59 pm (upload a pdf file to the Canvas assignment)

Choose ONE of the following two options to complete and upload to Canvas.

Option 1:

Assignment:
Carefully read section 6.7 in the text book, on Inner Product Spaces.

1. Type/write (neatly) one paragraph describing the main point of this section of the book.
2. Do the following problems, like a homework assignment. (Writing this by hand is totally fine. I don't expect this to be typed.)

   6.7 #1, 3, 4, 7, 10, 13, 18, 21, 25

What to upload to Canvas:
One pdf file that contains your paragraph write-up and then your hand-written homework problems.

Option 2:

Assignment:
Read through this paper, "The $25,000,000,000π Eigenvector--The Linear Algebra Behind GOOGLE" (here's the link in case you're reading this in printed fashion on paper https://www.rose-hulman.edu/~bryan/googleFinalVersionFixed.pdf), carefully. It might take you a few sittings to get through the paper...i.e. it's not likely that you'll be able to sit down and read through the entire paper in one sitting because it's pretty dense, but oh so cool!!!

1. Write up, neatly by hand, lecture notes from this paper. In other words, summarize this paper into a lecture that a teacher could give a linear algebra class to help the students understand the basics of the paper and how it relates to eigenvectors.

What to upload to Canvas:
One pdf file that contains your lecture notes.