

## Problem Set #3

ECON 833, Prof. Jason DeBacker  
Due Tuesday, September 9, 1:15 p.m.

This problem set will have apply the visualization tools you've learned to data that is of interest to you.

Please use Python to create three visualizations of data related to a topic you would like to research further. These visualizations will be graded based on:

1. The information content communicated from the visualization.
2. The efficiency of the code used to generate the pictures (Did you read in data correctly and transform it with a minimal number of steps? Do you use functions/loops to save on redundant lines of code? Do you have proper documentation?)
3. The aesthetics of the visuals.

You will submit your problem set by pushing the files to your GitHub repository that you created from forking the repository for this class. You will all files for the problem set in the path `/CompEcon_Fall2025/ProblemSets/ProblemSet3/`. These files will include:

1. At least one `*.py` script that creates your images
2. PNG files of your figures
3. A pdf compiled from TeX that includes your 3 images as well as a description of them (data used, what they mean, etc.)

Please name your pdf "ProblemSet3\_LastName.pdf".

P.S. On a future problem set I will ask you to use Python or R to estimate an econometric model on some data that are of interest to you. You might think ahead and consider data that you can use for both of these problem sets. You can explore those data here with your visualizations to help inform your econometric specification.