Final Project

Ec143 – Spring 2024

Due Date: May 9th, 2024 by 5PM

The purpose of the final project is to provide an opportunity for you to employ some of the theoretical and computational tools introduced in lecture to explore a research question of interest to you personally. It is fine for the project to be done in conjunction with a research project done for another class, but permission for this needs to be granted by all of the involved instructors beforehand. The main requirements for the project are as follows:

1. It should involve the use of real data to explore a question of interest to you.

2. The data should be analyzed using figures/maps, summary tables as well as statistical methods introduced in this class *and/or* other data science, statistics and econometrics classes you have taken. As a rough guide a good project will include 2-3 figures, 2-3 displays of summary or descriptive statistics (e.g., cross-tabs) and the presentation of estimation results from a small collection of econometric models (e.g., OLS, instrumental variables or quantile regression fits with different conditioning variables).

3. The analysis and write-up should be done in Python using a Jupyter notebook (with all project narrative included in markdown cells). Code should be clearly commented. The write-up should explain the assumptions being invoked to justify the analysis and also include a discussion and interpretation of any results. A clear discussion of the limitations of the analysis and how it might be improved through further work should also be included.

Please come by office hours to talk about your projects; I will do my best to brainstorm and help you develop your ideas.

The aim is for the project to be fun and useful to you. A good project can help jumpstart a senior thesis and also be something you can show to potential employers to advertise your skills.

Working in groups: the presumption is that each student will do their own project. However I will consider requests for groups of up to three students to work together if they share closely related interests. In the event of group work the expected standard increases (i.e., better/more data and a more extensive analysis and write-up is expected). Also group projects need to include a few paragraphs explaining each team members' specific contributions. *Finally group projects need to be approved in advance.*