Valuable resources for your first week of Econ 182

January, 2025

During this first week of classes, you should get familiar with the course website and watch the first batch of video lectures on YouTube. In parallel to that, we also recommend that during this week you should start playing with certain tools that will turn to be fundamental in this course. This is a non-exhaustive list of free (or close to free depending on your choice of statistical software) resources that we find to be extremely useful for this and many other Econ courses.

1. GitHub

Free while you are a student. Explore the multiple resources and benefits you can get from getting started with the GitHub Student Developer Pack. You may find interesting to get a brief introduction from Codespaces, AI Prompting and technical writing (remember the paper you need to write by the end of this quarter) to a relatively well-crafted 4-week Career Readiness prep course, among other tools. In addition to that, you may use the GitHub Copilot integrated with Visual Studio Code (more on that later in the section **3. Visual Studio Code**) for a hands-on coding learning experience.

2. Overleaf

You have access to professional features with your UCSC email . As you'll have several opportunities in this class to train your presentation skills, you will certainly benefit from creating papers and presentations with a full academic atmosphere. Overleaf is an online LaTeX editor that allows a cooperative environment for you and your team members to work on your project. Click here to get started.

Although there is already a myriad of LaTeX templates of virtually anything in the Overleaf website, you may find cool to check Professor Pascal Michaillat's minimalist LaTeX templates for both academic presentations and research papers.

- Paper template (e.g., this very file).
- Presentation template.

3. Visual Studio Code - for virtually any programming language

Code faster and efficiently. VS Code is a free, user-friendly code editor for any programming language of your choice, and it can be downloaded here. Even if you are just a beginner, or an aspiring beginner, VS Code has a powerful extension called GitHub Copilot that can smooth out your coding experience. It suggests code completions in real time. Depending on what you're coding, it may suggest individual lines of code and even complete functions. It also comes with a chat extension that helps you further polish your code."

Make sure you create your GitHub account from your UCSC email (go back to section **1. Github** for more information); you need to do that in order to use GitHub Copilot for free.

4. Stata

A convenient, not free tool. Stata is a statistical software package developed for data manipulation, visualization, statistics, and automated reporting. It has a convenient point-and-click interface, which may be easier than actually dealing with R or Python scripts.

It comes at a cost, though. You have the option to purchase a 6-month student license for $48. You will only need to upload a copy of your student ID. In general, it takes up a couple of days to receive your activation key if you purchased it on a weekday.

There is an official YT channel with video tutorials, but you can always look for better tutorials elsewhere. UCLA has a cool page with intro tutorials for both Stata and R.

5. Matlab

A free tool. MATLAB is a programming environment for algorithm development, data analysis, visualization, and numeric computation. Simulink is a graphical environment for simulation and Model-Based Design of multidomain dynamic and embedded systems. The good news is that the UCSC has a campus-wide license for Matlab and it has a great repository of Q&A and free self-paced online courses. Despite all these resources, you may still find ChatGPT and the like a better, more efficient help anyway.