

# SODA 501 Problem Set 1

Songtao Duan

Jan 18, 2026

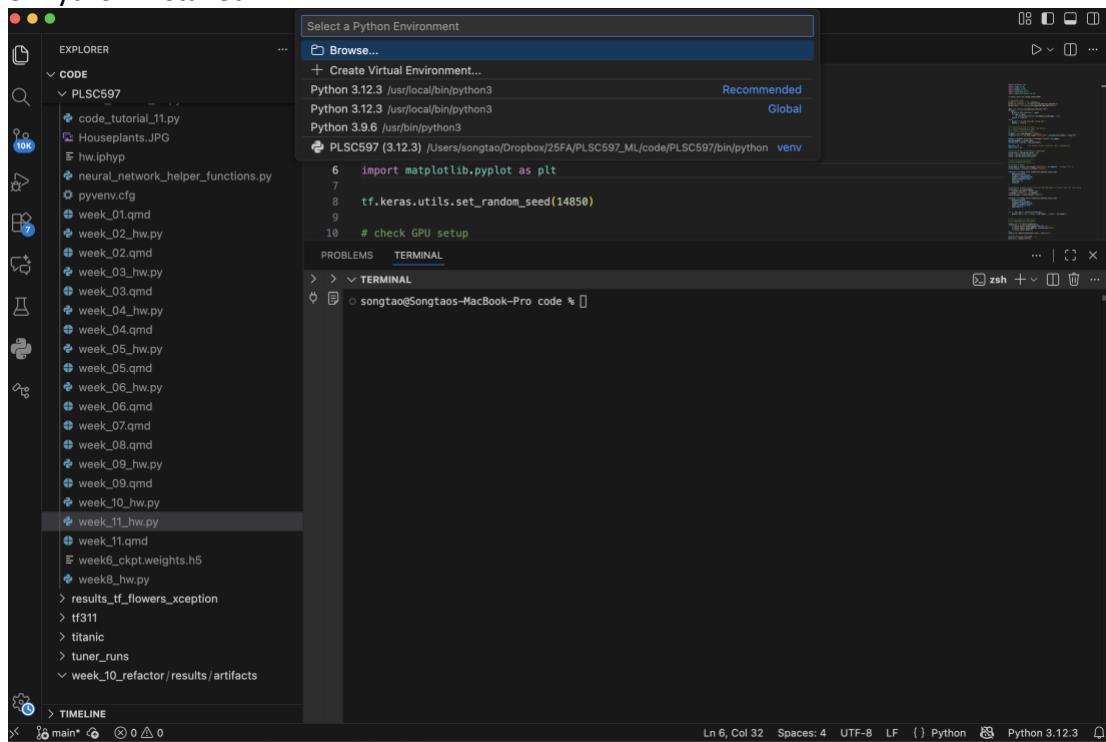
## 1. GitHub Account

The screenshot shows the GitHub profile of user 'songtaoduan'. The profile picture is a white circle with a large green plus sign in the center. The profile summary includes a bio: 'Just a new try', a public repository 'hello-world' (Forked from paulgp/hello-world), a public template 'songtaoduan.github.io' (Forked from GarciaRios/govt\_6029), and a public repository 'applied-methods-phd' (Forked from paulgp/applied-methods-phd). It also lists a public repository 'govt\_6029' (Forked from GarciaRios/govt\_6029) and another public repository 'causal\_inference23' (Forked from kmunger/causal\_inference23). The profile indicates 0 followers and 6 following. The GitHub interface features a dark theme with light-colored cards for each repository.

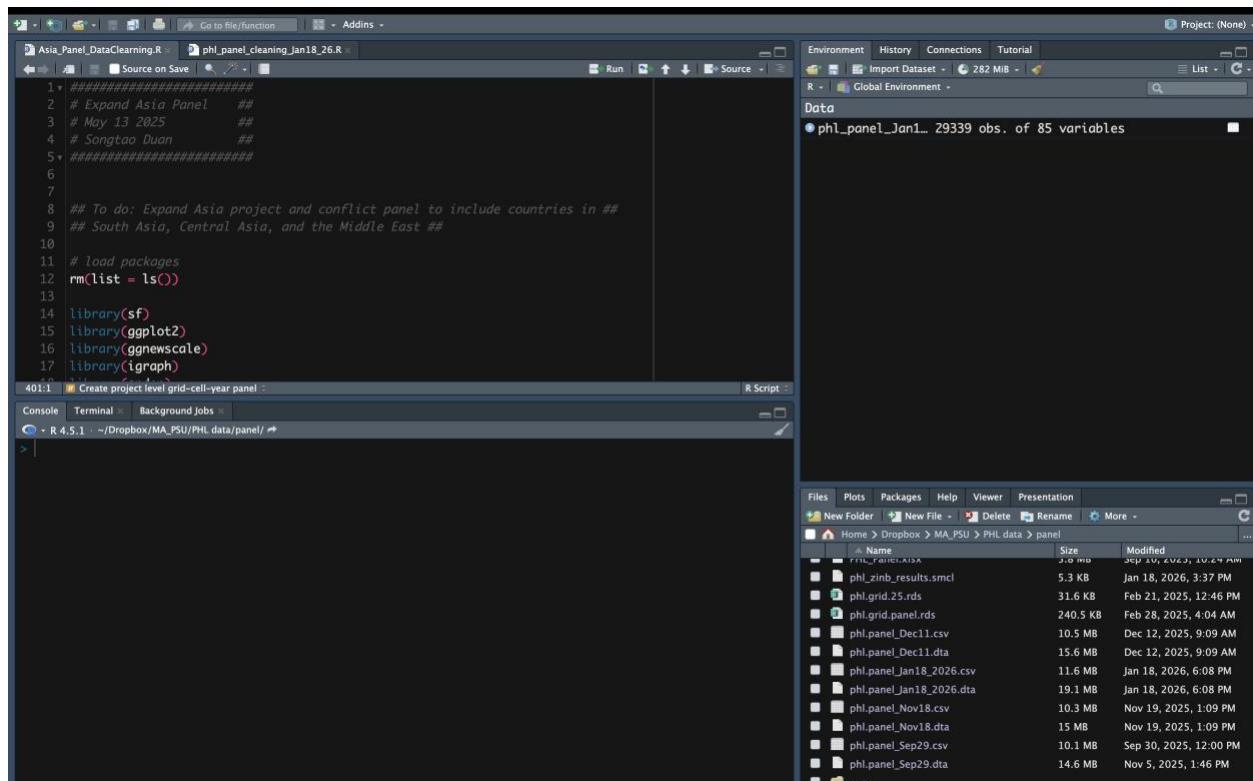
## 2. Git installed (git --version)

The screenshot shows the GitHub Desktop application interface. The top bar displays the current repository as 'hello-world', the current branch as 'main', and the fetch origin status. A notification bar at the top right informs the user that an updated version of GitHub Desktop is available. The main window shows a 'Changes' tab with a message 'No local changes' and a note that there are no uncommitted changes. Below this is a terminal window showing the command 'git version 2.39.5 (Apple Git-154)' being run. On the right side of the interface, there are three buttons: 'Open in RStudio', 'Show in Finder', and 'View on GitHub'. The bottom of the window has a blue 'Commit to main' button.

### 3. Python Installed



### 4. R installed (version 4.5.1)



## 5. IDE installed

- see RStudio and VS Code page above.

## 6. Cloud-synced course folder (Dropbox: SODA501)

The screenshot shows a dark-themed Dropbox interface. On the left, a sidebar lists 'Home', 'Folders' (containing 'All files / 26SP' with sub-folders 24FA, 25FA, 25SP, 25SU, 26SP, Apps, Archive, Conference, Cornell method seq, Econometrics Textbook, Field Experiments ..., Funding, GODAD Workshop, HealthRecord, ICPSR 22, Infrastructure), 'Activity' (empty), and 'More' (empty). The main area shows a folder named 'SODA 501' with a star icon. It contains three items: 'syllabus.pdf' (PDF file, 'Only you', 1/17/2026 11:00 pm), 'w1' (folder, 'Only you', --), and 'slides' (folder, 'Only you', --). Top navigation includes '+ New', 'Search', 'Invite members', 'Upgrade', and user profile.

## 7. Compression utility

- Unarchiver installed

The screenshot shows the 'Preferences' window for 'The Unarchiver'. At the top, tabs for 'Archive Formats', 'Extraction', and 'Advanced' are visible, with 'Archive Formats' selected. Below the tabs, a section titled 'Open these archive types with The Unarchiver:' lists various file formats and their extensions. A blue border highlights the first few items in the list:

File Format	Extensions
Zip Archive	zip, z01
RAR Archive	rar, r00, r01, r02, r03, r04, r05, r06, r...
7-Zip Archive	7z
LhA Archive	lha, lzh
Zipx Archive	zipx
Stuffit Archive	sit, sitx, 1
BinHex File	hqx
MacBinary File	bin, macbin
AppleSingle File	as
Gzip File	gz, gzip
Gzip Tar Archive	tgz, tar-gz
Bzip2 File	bz2, bzip2, bz
Bzip2 Tar Archive	tbz2, tbz

## 8. Jupyter installed (within vscode)

The screenshot shows the VS Code interface with the following details:

- Explorer:** Shows a folder named "SODA 501" containing subfolders "slides" and "w1", and files "hw1\_duan.docx", "syllabus\_day.pdf", "w1\_jupyter.ipynb", "w1\_python.py", and "syllabus.pdf".
- Editor:** A Jupyter notebook cell with the code `print ("Hello, World!")` is selected. The output pane shows the result: `Hello, World!`.
- Terminal:** A terminal window titled "Python 3.12.3" is open, showing the command `print ("Hello, World!")` and its output.
- Bottom Bar:** Includes icons for file operations like Open, Save, and Close, along with "Spaces: 4 LF ()" and "Cell 1 of 1".

## 9. SQLite tools installed

The screenshot shows the DB Browser for SQLite interface with the following details:

- Toolbar:** Includes "New Database", "Open Database", "Write Changes", "Revert Changes", "Undo", "Open Project", "Save Project", "Attach Database", and "Close Database".
- Table View:** A table named "GEDEvent\_v24\_udt" is displayed with 27 rows of data. The columns are: field1, field2, field3, field4, field5, field6, field7, field8, field9, field10, field11. The data includes various IDs, years, and categorical values.
- Bottom Bar:** Includes "SQL Log", "Plot", "DB Schema", and "Remote".

## 10. IRB



Completion Date 11-Oct-2024  
Expiration Date 11-Oct-2027  
Record ID 64675654

This is to certify that:

**Songtao Duan**

Has completed the following CITI Program course:

Not valid for renewal of  
certification through CME.

**Human Subjects Research**  
(Curriculum Group)

**Social and Behavioral Human Subjects Research (IRB) Course**  
(Course Learner Group)  
**1 - Basic Course**  
(Stage)

Under requirements set by:

**Pennsylvania State University**



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Completion Date 20-Oct-2024  
Expiration Date N/A  
Record ID 64641640

This is to certify that:

**Songtao Duan**

Has completed the following CITI Program course:

Not valid for renewal of  
certification through CME.

**Responsible Conduct of Research**  
(Curriculum Group)

**Responsible Conduct of Research (RCR) - Basic**  
(Course Learner Group)  
**1 - Basic Course**  
(Stage)

Under requirements set by:

**Pennsylvania State University**



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