Effective Programming Practices for Economists

Miscellaneous Tools

Why use shells today?

Janoś Gabler and Hans-Martin von Gaudecker

Command line interfaces vs. GUIs

CLI

- Faster if you know commands
- More precise
- Do everything in one place and don't change windows
- Multiple steps can be chained and automated to become one

GUI

- Faster for beginners
- Less need to memorize
- Use an interface that is designed specifically for your task
- No potential for automation or command chaining

Task that can be done in a Shell	Alternative	Recommendation
Install packages and manage environments	-	Shell
Version control with git	Git GUI, VS Code	Shell
Run tests for your Python project	VS Code	Shell
Run your fully automated research pipeline	VS Code	Shell
Debug your python code with a debugger	VS Code	You decide
Create, copy and delete files	File Explorer	You decide
Try out things in a Python REPL	Jupyter Notebook	You decide
Edit files in vim	Modern Editor	Modern Editor

Aside: Learn typing

- You won't be fast in the command line if you cannot touch-type

- After one or two days of practice you will be as fast as before

- Huge payoffs in the long run!

- Many free apps to learn it!

- No single person has ever regretted to have learned it