

Software Carpentry

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"FINAL".doc



FINAL.doc!



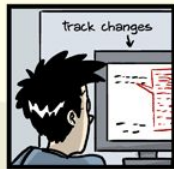
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What makes research reproducible

It is knowing **what has been** done and **how has it been done**.

1. Enumerate the “set pieces”: data, code, parameters
2. Explain the rationale of behind making certain choices
3. Ensure consistency in space and time: from computer to computer, or this year to next

Reproducible research

1. It shouldn't be an extra burden.
2. We do it because it helps us primarily.
3. We get better at those things that we practice
4. If we do it all the time, no extra effort is needed

JUST REDO IT



The three essential ingredients

1. Version Control
2. Documentation
3. Automation

Doing it live

“Live” slides to follow

Basic git commands

git clone - to get a repository from hithub (needs to be done once)

Git status - the state of my git repository

Git diff - what exactly has changed

Git add - add a new file to git tracking (needs to be done once)

Git commit -am 'Some message' commits changes to added files

Git push - push to remote

Git pull - pull from origin (automatic merge is possible)

Version controls everyting but BIG data

- Document everyting - very short docs will to magic

LIVE LESSONS FOLLOW

Live lessons on

1. git/version control
2. documentation with markdown
3. using make