## Problems with research software

- Does it even work?
- Will it still work when I have to revisit the subject in a couple of years? How will I be able to tell?
- Will I be able to understand the code?
- Can anyone else understand it?

You face these problems even if you don't care about reproducibility, openness, availability to other researchers, etc





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Always wanted to travel back in time to try fighting a younger version of yourself? Software development is the career for you!









## What helps?

- Sharing code code review dissemination and discussion
- Version control keep track of what changed and why, return to an earlier state
- Software testing unit tests, regression tests



## We'll be looking at...

Keeping an experimental log with IPython Notebook

- So you can get feedback from others
- So you'll be able to understand later what you were doing Modularising and testing common components
- So you can be more confident they work correctly
- So you'll know if they ever stop working correctly

Managing it all in version control

- So you can recover specific versions
- So you can review what you did

