Improving your skillset

Good research code

Patrick Mineault

Lesson 5

Maybe the real good code is the friends we made along the way

Lesson 5

Work with better people than you

Reality check

- ▶ People think that programming is a solitary activity
- ▶ Reality: at a place like Google, programming is very social
 - readability
 - code reviews
 - design reviews
 - pair programming
 - reading groups
 - retreats
 - performance reviews

Open discussion

Q: what is pair programming?

Practical tips

- ▶ Open an issue in an open source project
- Open a PR in an open source project
- Set up pair programming with people in your lab or study group
 - ► One person drives, one person co-pilots
 - ► Learn how at NMA2021!
 - CoCalc and DeepNote can do this remotely.
- Set up study group with fellow programmers (event suggestions from Mozilla).

Set up a review circle

You can use Github Pull Requests to give and receive line-by-line feedback on code.

It doesn't have to be lonely

- Maybe you're the best coder in your lab so you don't have opportunities for growth
- Contribute to open source projects
 - ► NMA & NMC are always happy to have more people!
- ► Join a community or hackerspace
 - BrainHack.org
 - Meetup
 - Hackerspaces
 - PyLadies

Become a wizard!

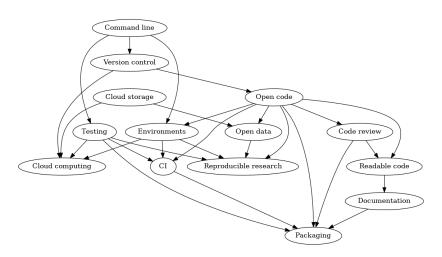


Figure 1: zine by Julia Evans, released under CC-BY-NC-SA 4.0 license

Wizard!

- ▶ Great zine about how to become a wizard from Julia Evans
- ► Zine link

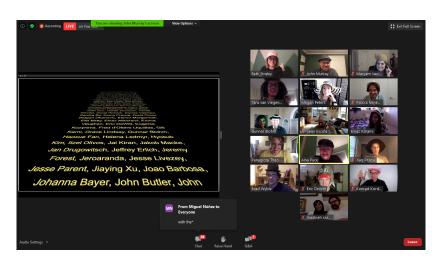
You are never finished learning!



Acknowledgement

Thanks to the reviewers, Tyler Sloan and Elizabeth DuPre who made this talk much better.

You can accomplish anything!



Lesson 5

- Work with better people than you
- It's a bit of a stretch to make this work with the theme of WM & LTM
 - ► The most important point: grow with people
- ► Your 5-minute exercise: schedule one pair-programming session