Improving your skillset

Good research code

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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 groupwith 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.

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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
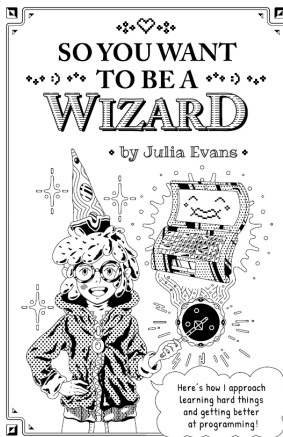   - ▶ Hackerspaces
    - ▶ PyLadies

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
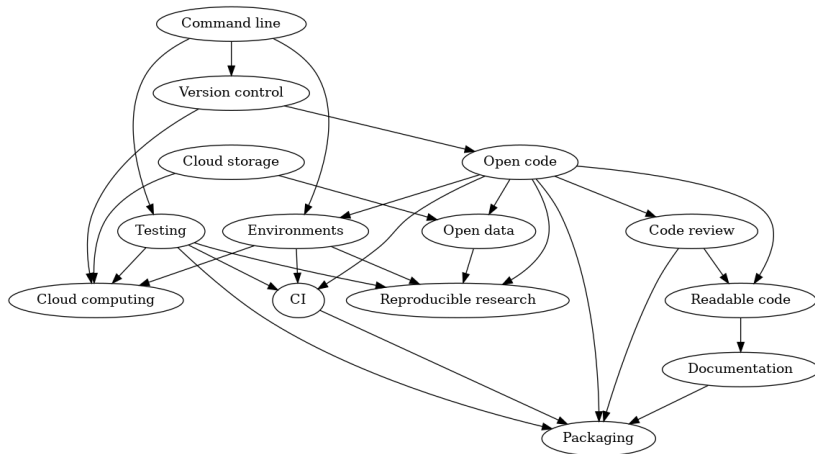
You are never finished learning!

Figure 2:

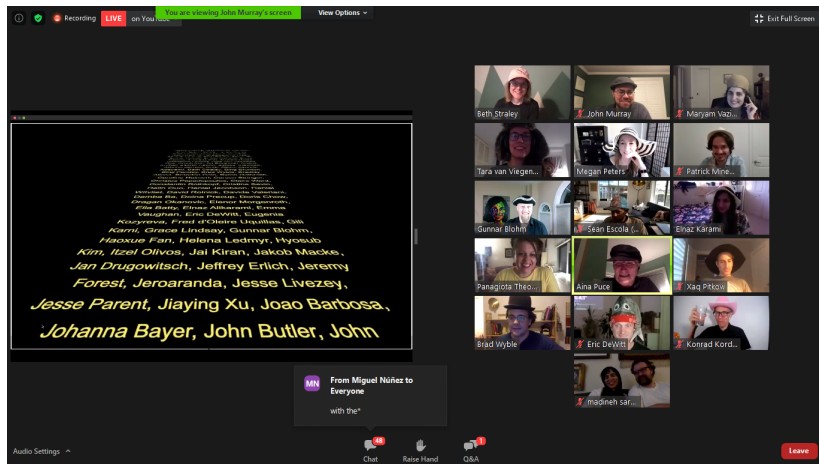# You can accomplish anything!

Figure 3:

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