# Training Computational Social Science PhD Students for Academic and Non-Academic Careers

Jae Yeon Kim

Johns Hopkins, ex-Code for America

July 14, 2024

#### About me

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- Currently, research scientist at the SNF Agora Institute at Johns Hopkins and fellow at Harvard Kennedy School's Center for Public Leadership.

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#### Plan

What's CSS portfolio?

2 How to build CSS portfolio

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  - ▶ As we shall see, these distinct components' proportions vary by audience and deliverable types.

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  - Or we are not well trained to be good communicators and presenters (going beyond job talks).

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  - Blog posts (for non-academic).

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- Start early.
- Use GitHub (there's a student developer pack!) to manage your research processes as well as outputs and document them (using README, etc).
  - Bonus: it helps you prepare replication code and data for journal publications.

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  - If you published a paper, write a public-facing blog post.
- Document feedback: start writing a brag document
  - Publication credits are easy to capture; others are not.

### Kudos Example 1



Drew Engelhardt @amengel.bsky.social · 15h

Huge thanks to @jaeyeonkim.bsky.social for his {tidytweetjson} package and helpful tutorial. Went from crashing my RStudio attempting to read in a JSON file with 1.1 million tweets running overnight to loading and reformatting everything in just 10 minutes.

jaeyk.github.io/tidytweetjson/

jaeyk.github.io

#### **Tidying Tweet JSON files**

Twitter data is an important resource for social science research. However, parsing a great deal of Twitter JSON data is not an easy task for researchers with little programming experience. This packa...



Jae Yeon Kim @jaeyeonkim.bsky.social · 1h

I'm glad to know that the code still works after 4 years!



Q1



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Drew Engelhardt
@amengel.bskv.social

Works great! The package and the tip to use gsplit have made dealing with >200GB of tweets much easier. Appreciate it!

# Kudos Example 2



Being an epidemiologist/nutritionist, I have been really enjoying reading @JaeJaevkim2's Computational Thinking for Social Scientists (iaevk,github.io/PS239T/). Improving computational efficiency is the way forward to reduce the information gap and improve the capacity building.



Computational Thinking for Social Scientists

オープンアクセスの書籍でしょうか。かなりまとまってますね。こういう コースをどこかでできたらいいな、と思ってます。

Translated from Japanese by Google

Computational Thinking for Social Scientists

Is it an open access book? It's quite comprehensive. I hope to be able to do a course like this somewhere.





iaevk.github.io Computational Thinking for Social Scientists

Computational Thinking for Social Scientists, Online textbook for Teaching Computational Tools and Techniqu...

Figure 2: Kudos example 2

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#### **Takeaways**

- 1. If you create values, you also need to capture them.
- 2. You capture values by purposefully creating a CSS portfolio (!= just papers).
- 3. You create a portfolio by taking one extra step.
- 4. Practice makes you more efficient. So, start early!
- 5. Finally, balance between efforts and opportunities.

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#### Thank You

Comments or questions? E-mail: jkim638@jhu.edu

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- Nolan, Deborah and Sara Stoudt. 2021. "The promise of portfolios: Training modern data scientists." *Harvard Data Science Review* 3(3).
- Robinson, Emily and Jacqueline Nolis. 2020. *Build a career in data science*. Manning Publications.