# Data Carpentry Wrap-Up



Thank you all for your hard work!

Big thanks to our instructors, helpers, and workshop organizer!

### Workshop Recap

- Discussed the dos and don'ts of spreadsheets
- Cleaned messy tabular data with filtering, sorting, and faceting in OpenRefine
- Wrote SQL queries to select, filter, aggregate, summarize, and join data in relational databases
- Wrote code to create and manipulate basic data structures in Python/R
- Wrote code to select, filter, aggregate, and summarize tabular data in Python/R
- Created data visualizations in Python/R using the principles of the Grammar of Graphics

# Where to go from here?

# Success is the sum of small efforts, repeated day in and day out.

**Robert Collier** 

### Practice ideas:

- Your own work at the Smithsonian!
- Weekly TidyTuesday Datasets:
   <a href="https://github.com/rfordatascience/tidytuesday">https://github.com/rfordatascience/tidytuesday</a>
- SQL Murder Mystery: <a href="https://mystery.knightlab.com/">https://mystery.knightlab.com/</a>
- Automate the Boring Stuff with Python:
   <a href="https://automatetheboringstuff.com/">https://automatetheboringstuff.com/</a>



### Smithsonian Carpentries Website

### https://datascience.si.edu/carpentries



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### Carpentries, Genomics, and Data Science training at the **Smithsonian**



The Carpentries (comprised of Data Carpentry, Library Carpentry, and Software Carpentry) is a project whose mission is to teach foundational computational and data science skills to researchers and others who create, manage, and use

The Smithsonian Institution has been a member organization since 2017, and a Platinum Member since 2021. More than 500 Smithsonian staff, fellows, and interns have taken at least one Carpentries course since then. We also conduct custom workshops, most of which have been genomics-related. Workshop materials can be found on our GitHub page. You can read more about the Smithsonian Carpentries team in our 2019 annual report.

We offer peer-led workshops for Smithsonian staff, academic appointees, contractors, volunteers, and other SI-affiliated individuals on a fairly regular basis. To be informed of these workshops and other SI Carpentries events, you can sign up for our announcement mailing list. To sign up for notifications, click the button below and enter your email address:

Sign up for the Carpentries-announce mailing list

### **Trained Carpentries Instructors**

We are looking for Smithsonian staff and fellows to be trained to join our team of instructors. No prior teaching experience is necessary, but we suggest experience with using one or more of the following: OpenRefine, Python, R, SQL, Unix, or GitHub. All instructors attend a virtual 4-half-day training workshop using evidence-based techniques for teaching computational skills.

We will be accepting applications on a rolling basis.

Apply to join the SI Carpentries Instructor Team

# Resource Email Account

For data and/or Carpentries-related questions:

Carpentries@si.edu

Feel free to email any of the instructors or helpers directly

Carpentries-Announce Mailing List For announcements of upcoming SI Carpentries workshops and events:

https://si-listserv.si.edu/cgibin/wa?SUBED1=CARPENTRIES-ANNOUNCE&A=1

Sign-up link is also available on the SI Carpentries Website

### Carpentries-Alumni Slack Channel

- 1. Sign up for the Smithsonian Slack. If you already are a part of the Smithsonian Slack workspace, skip to Step #3. Go to <a href="https://smithsonian.slack.com/signup">https://smithsonian.slack.com/signup</a>, and enter your SI email account (must be @si.edu).
- 2. You will get an email from Slack, and click Confirm Email. This link will send you to a page where you will fill in your name and set a password. After doing this, you will be logged into Slack. You will automatically be added to the #general and #random channels. These channels appear at the top of the list of all channels on the left side, and all others are greyed-out.
- 3. In the left-hand sidebar, under the Channels header, you should see an option to + Add channels. Click this link, then select Browse all channels. Search for carpentriesalumni. Click on the channel, then click the Join Channel button.

Carpentries
Alumni
Microsoft Team

You can access the "Carpentries Alumni" Microsoft Team with this <u>direct link</u>. The "Carpentries Alumni" team is set as a public team, so you should be able to access it via the Teams button on the left sidebar.

# SI Carpentries Community Chat

Monthly lunchtime gatherings to discuss topics relating to Smithsonian Data or Software Carpentry workshop content.

Fourth Thursday of every month from 1pm-2pm ET.

Zoom links provided via Carpentries-Announce mailing list and Slack/Teams channels.

Schedule: <a href="https://github.com/SmithsonianWorksho">https://github.com/SmithsonianWorksho</a>
<a href="ps://github.com/SmithsonianWorksho">ps/carpentries-brown-bag/wiki/Schedule</a>

Archive of past talks:

https://github.com/SmithsonianWorkshops/carpent ries-brown-bag

## Become an Instructor

Apply to join the SI Carpentries Instructor team! We are always looking for Smithsonian staff and fellows to be trained to join our team of instructors.

No prior teaching experience is necessary, but alumni of the Carpentries workshops would make great candidates.

You can apply at:

https://forms.gle/zghh323SJuqlQdKZ8

(This link also exists as a big blue button on the SI Carpentries website.)



Please keep in touch with us and let us know how you use your new skills!

Are there any questions about the material we covered in this workshop or about Carpentries at the Smithsonian?