

# The Alan Turing Institute

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## Research Infrastructure Roles Hackathon

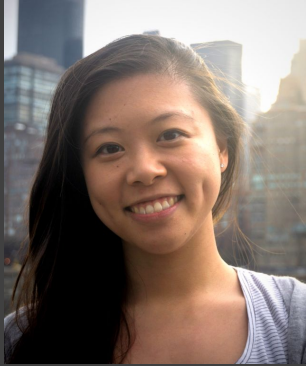
27 October 2022

Arielle Bennett, Jennifer Ding,  
Anne Lee Steele



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# Introductions



**Jennifer Ding**

Research Application  
Manager,  
The Alan Turing Institute  
TTW Core Contributor



**Arielle Bennett**

Programme Manager,  
Tools, Practices and  
Systems, The Alan Turing  
Institute,  
TTW Core Contributor



**Anne Lee Steele**

Community Manager  
*The Turing Way*,  
The Alan Turing  
Institute

# Overview



1. What is *The Turing Way*?
2. What is research infrastructure?
3. Discussion & Writing
4. Share-outs and Next Steps

# Overview

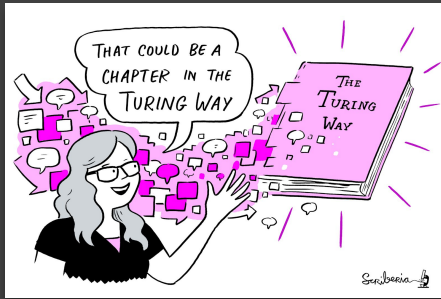


1. What is *The Turing Way*?
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# The Turing Way

## Open Source guides for Data Science and Research

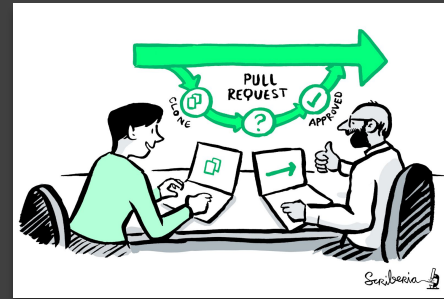
We involve and support a diverse community to make data science reproducible, ethical, collaborative and inclusive for everyone



A book



A global community

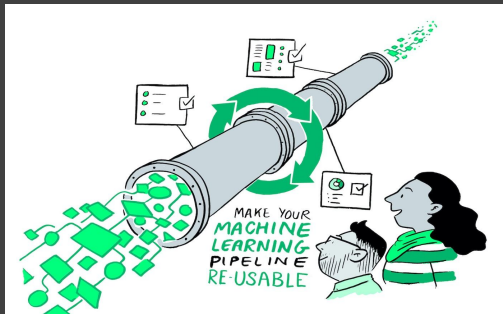


An open-source project



A culture of collaboration

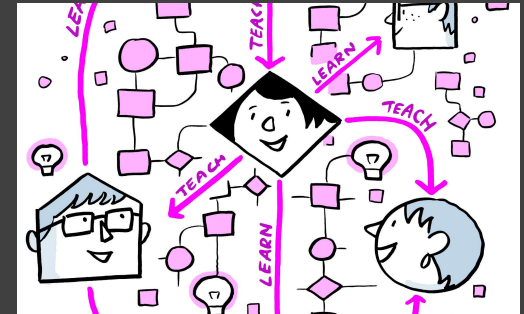
# About *The Turing Way* Guides



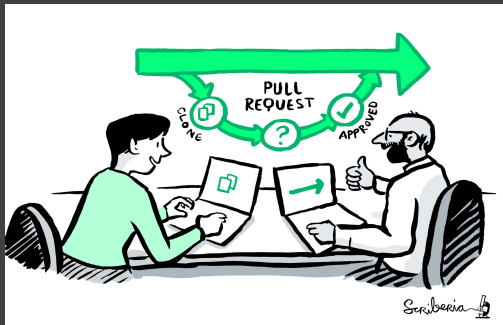
Reproducibility



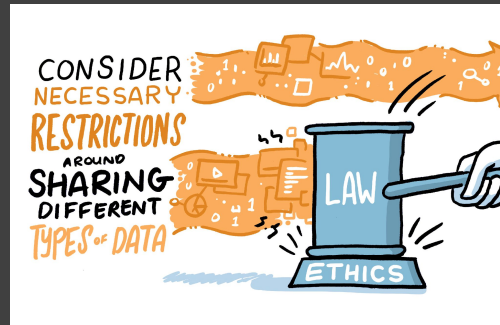
Project design



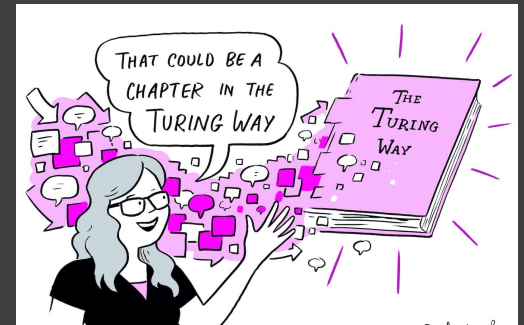
Communication



Collaboration



Ethical research



Community handbook

# How we practice open source and collaborative documentation

alan-turing-institute / the-turing-way Public

Code Issues 437 Pull requests 85 Discussions Actions

main 108 branches 8 tags

sgibson91 Merge pull request #2748 from alan-turing-institut... 17c6e2c 17 hours ago 10,515 commits

.github	Merge pull request #2748 from alan-turing-institut...	17 hours ago
README-translated	Fix typo and outdated labels on the French transl...	6 days ago
book	Merge pull request #2744 from vhellon/main	2 days ago
communications	Merge pull request #2357 from alan-turing-institut...	4 months ago
conferences	[MNT] Update links and references from master to ...	12 months ago
open-life-science-mento...	Update README.md	11 months ago
project_management	Merge pull request #1735 from alan-turing-institut...	5 months ago
tests	Update configuration for Yaml parser	5 months ago
workshops	Added GitHub workshops to README	15 days ago
.all-contributorsrc	update .all-contributorsrc [skip ci]	11 days ago

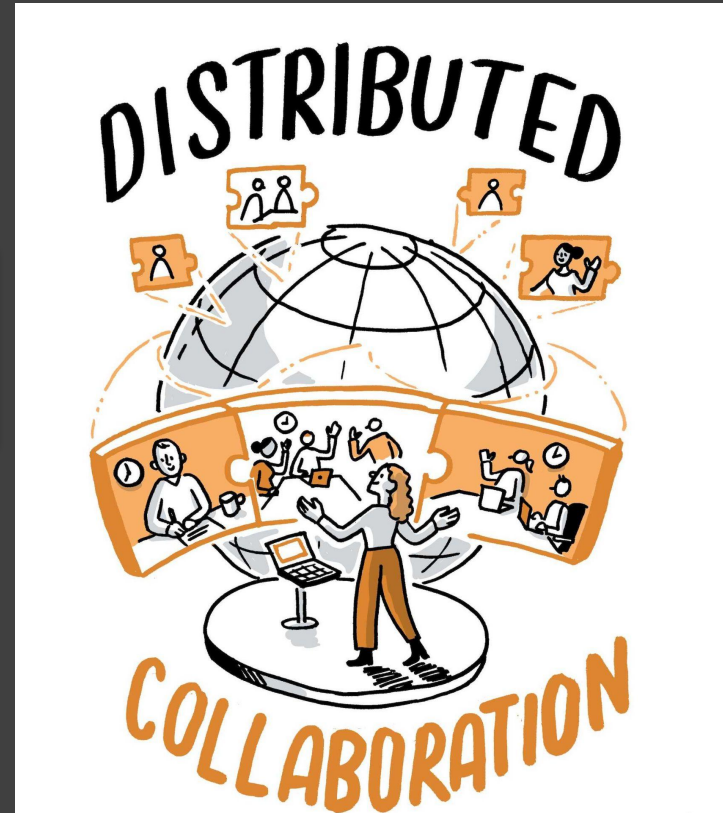
Host repository for The Turing Way: a how to guide for reproducible data science

[the-turing-way.netlify.app](https://the-turing-way.netlify.app)

community education data-science  
hacktoberfest hut23 hut23-270  
hut23-396

Readme View license Code of conduct Cite this repository 1.4k stars 50 watching 527 forks

All Contributors  
**Recognize All Contributors**  
Including those that don't push code



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# Collaboration in practice



Collaboration Cafes  
(bimonthly) and  
Coworking Calls (weekly)



Book Dash Events  
(biannual – in-person, virtual, hybrid)



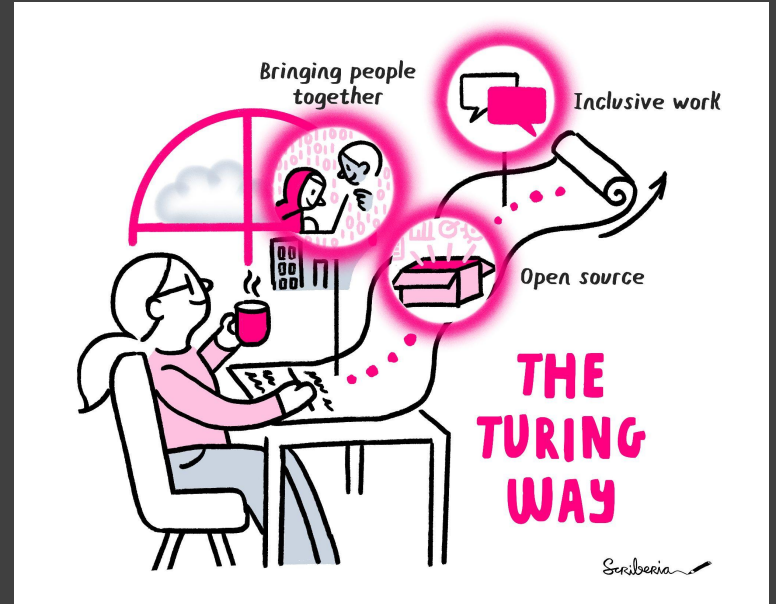
# Project and Community Growth



Fork 526

Star 1.4k

- ~4 years, >250+ live chapters
- 390+ direct contributors on Github
- 1000s of users, 14k+ downloads of images
- Used in policy, education, advocacy, training contexts



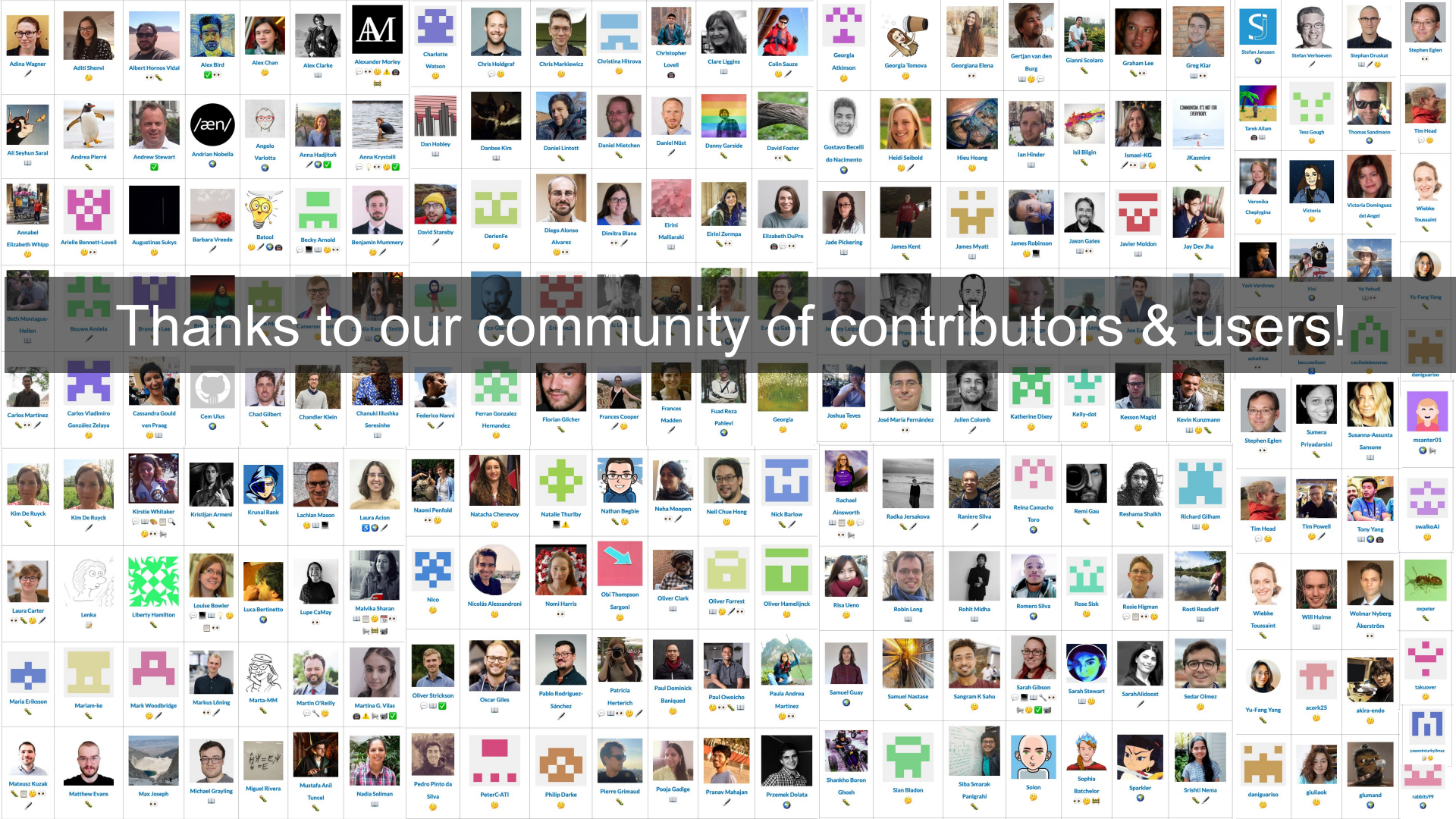
15,065

views

14,446

downloads

<https://zenodo.org/record/3332807>



Thanks to our community of contributors & users!

# Overview



1. What is *The Turing Way*?
2. **What is research infrastructure?**
3. Discussion & Writing
4. Share-outs and Next Steps

# What is research infrastructure?

Large research teams require:

- Tools
- Practices
- Systems

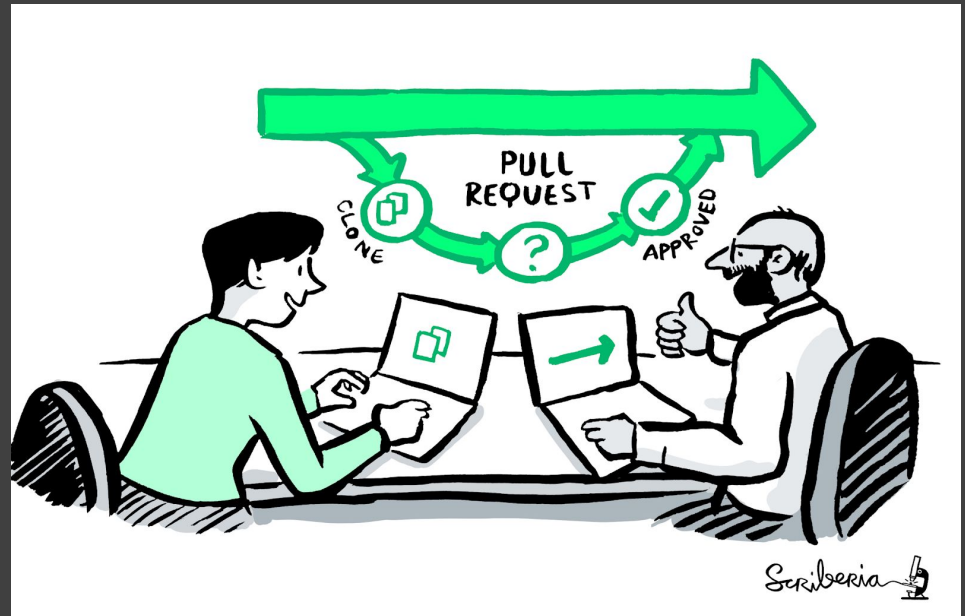
In order to collaborate effectively  
– like Big Team Science!



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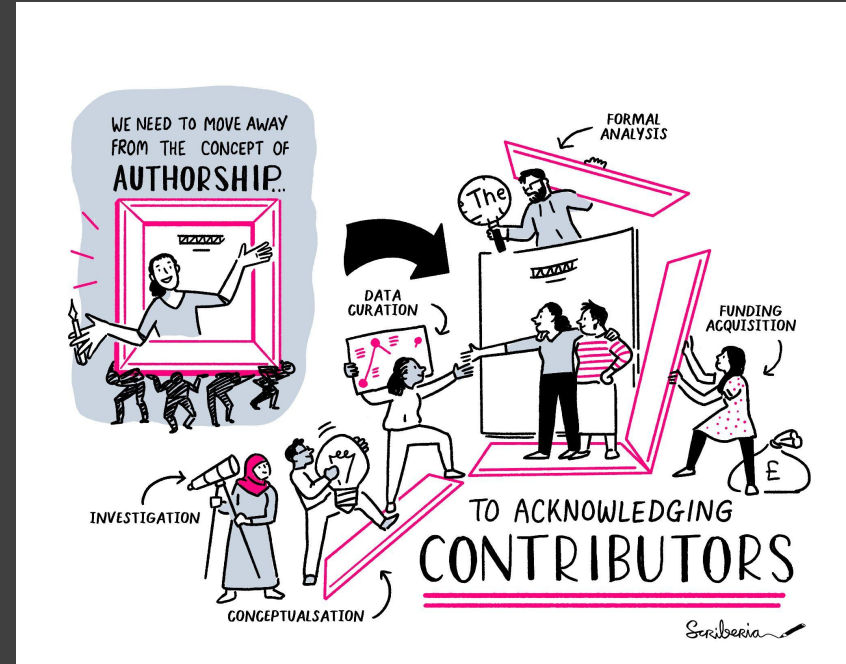
# Research infrastructure: Open Source Software

Open infrastructure is usually equated with open source tools that enable technical collaboration.



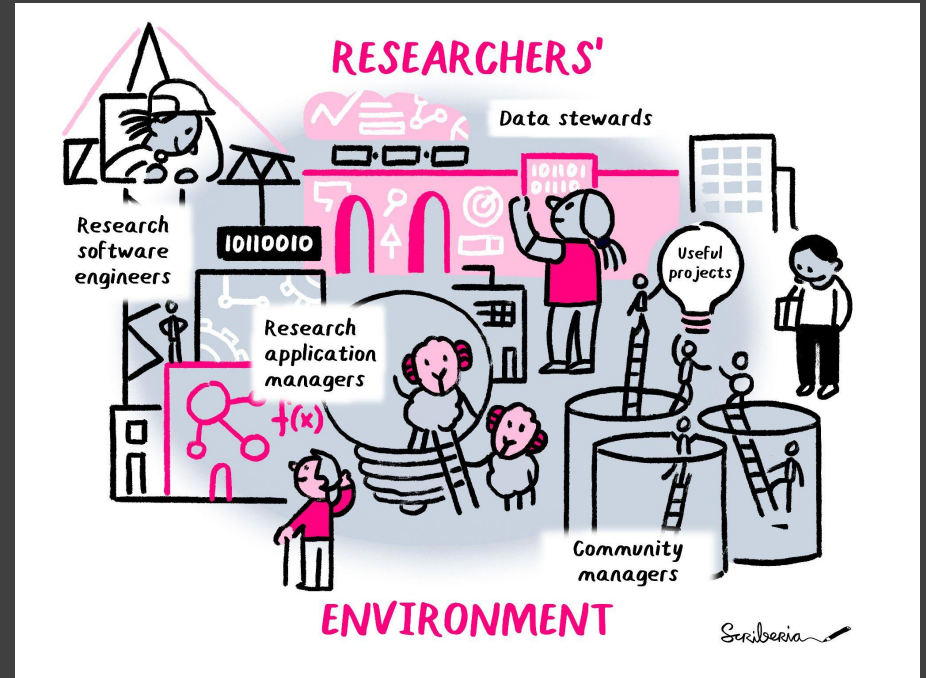
# Beyond tools: Investing in human infrastructure for research

Coordinating the people within large research projects can be one of the biggest blockers in addressing large scale, ambitious questions.



# Examples: Research Infrastructure Roles

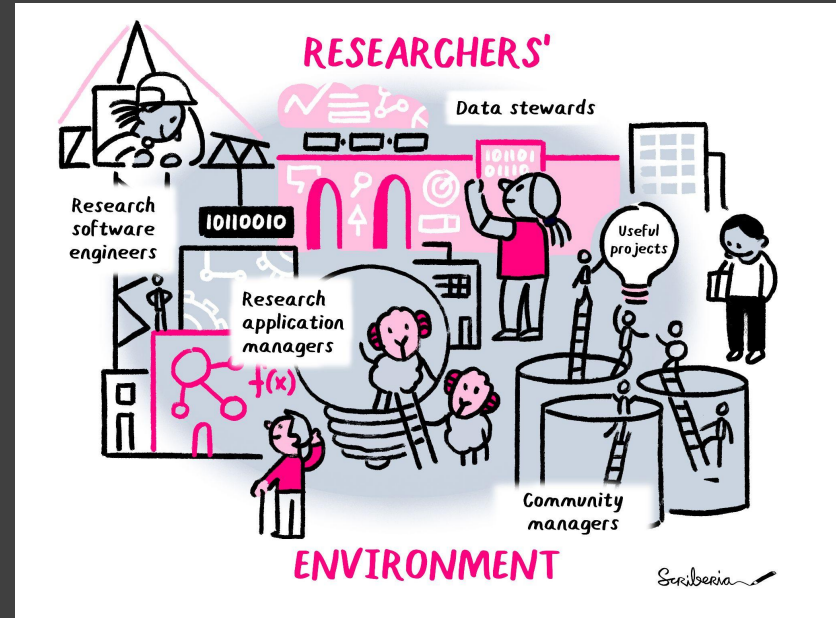
- Data Stewards
- Research Software Engineers
- Community Managers
- Research Application Managers (RAMs)
- Program Managers



# Can you think of other research infrastructure roles at your institution?

Add your answer to the pad:

<https://pad.sfconservancy.org/p/ttw-bts-rir-hackathon-oct22>





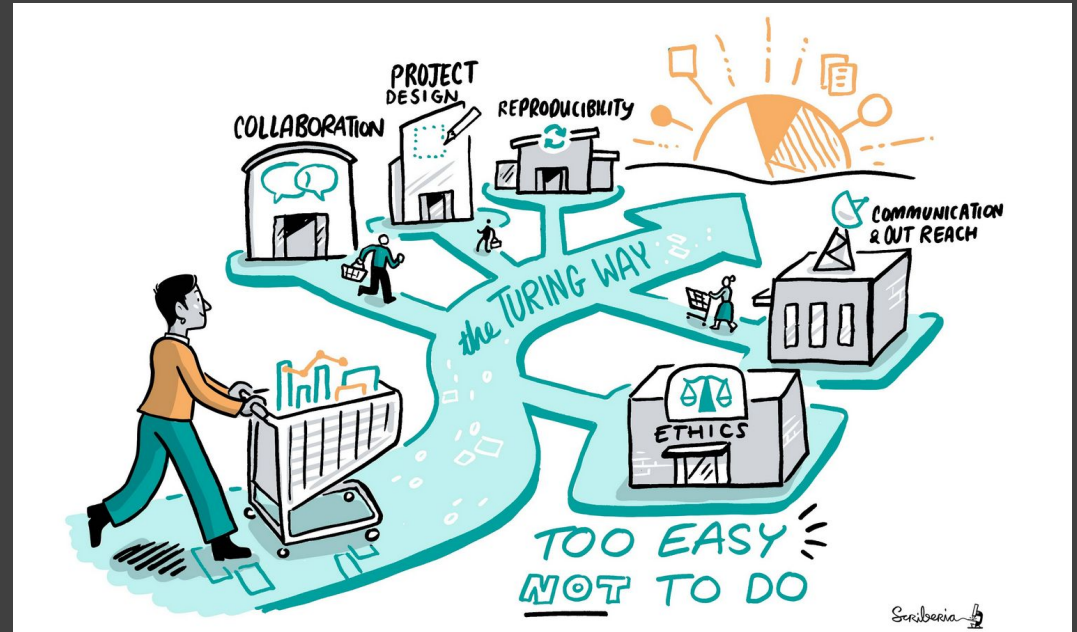
# Overview



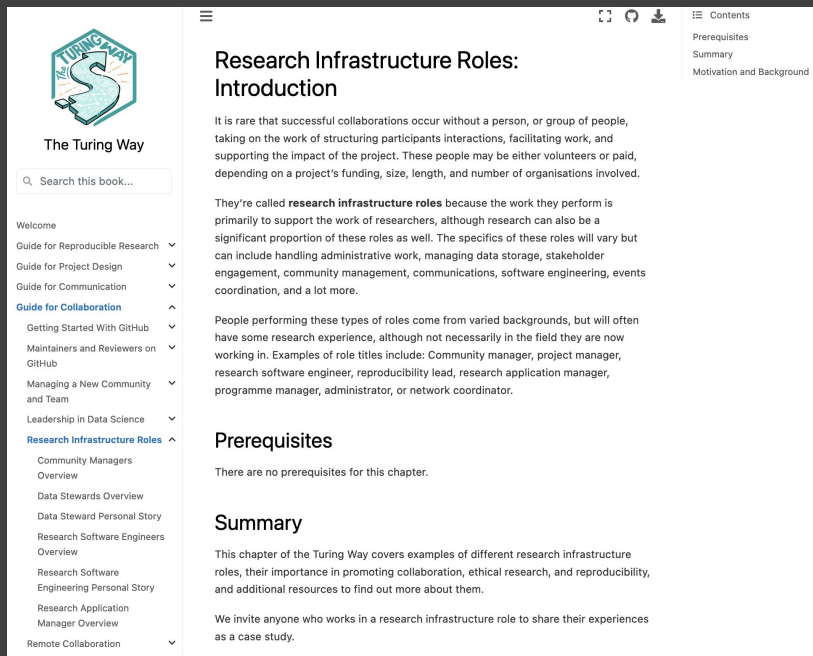
1. What is *The Turing Way*?
2. What is research infrastructure?
3. **Discussion & Writing**
4. Share-outs and Next Steps

# Summary

Now that we've talked about *The Turing Way* and research infrastructure roles (RIR)...  
now it's your turn!



# Research Infrastructure Roles Chapter



The screenshot shows the 'Research Infrastructure Roles: Introduction' page from 'The Turing Way' book. The page is divided into three main sections: Introduction, Prerequisites, and Summary. The Introduction section explains that successful collaborations often require people who structure interactions, facilitate work, and support the project's impact. It notes that these roles can be volunteers or paid, depending on funding, size, length, and the number of organizations involved. The Prerequisites section states that there are no prerequisites for this chapter. The Summary section invites anyone working in a research infrastructure role to share their experiences as a case study. The page also features a navigation menu on the left and a table of contents on the right.

## Research Infrastructure Roles: Introduction

It is rare that successful collaborations occur without a person, or group of people, taking on the work of structuring participants interactions, facilitating work, and supporting the impact of the project. These people may be either volunteers or paid, depending on a project's funding, size, length, and number of organisations involved.

They're called **research infrastructure roles** because the work they perform is primarily to support the work of researchers, although research can also be a significant proportion of these roles as well. The specifics of these roles will vary but can include handling administrative work, managing data storage, stakeholder engagement, community management, communications, software engineering, events coordination, and a lot more.

People performing these types of roles come from varied backgrounds, but will often have some research experience, although not necessarily in the field they are now working in. Examples of role titles include: Community manager, project manager, research software engineer, reproducibility lead, research application manager, programme manager, administrator, or network coordinator.

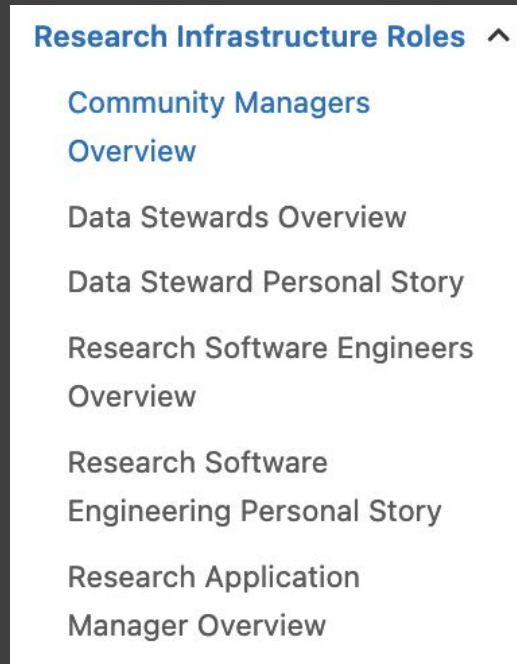
## Prerequisites

There are no prerequisites for this chapter.

## Summary

This chapter of the *Turing Way* covers examples of different research infrastructure roles, their importance in promoting collaboration, ethical research, and reproducibility, and additional resources to find out more about them.

We invite anyone who works in a research infrastructure role to share their experiences as a case study.



The table of contents for the 'Research Infrastructure Roles' chapter is displayed. It lists the following sections in order: Prerequisites, Summary, Motivation and Background, Community Managers Overview, Data Stewards Overview, Data Steward Personal Story, Research Software Engineers Overview, Research Software Engineering Personal Story, Research Application Manager Overview, and Remote Collaboration.

## Research Infrastructure Roles

- Prerequisites
- Summary
- Motivation and Background
- Community Managers Overview
- Data Stewards Overview
- Data Steward Personal Story
- Research Software Engineers Overview
- Research Software Engineering Personal Story
- Research Application Manager Overview
- Remote Collaboration

Today, we'll be contributing to this chapter in *The Turing Way!*

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# Live Demo

Can you think of other research infrastructure roles?

<https://github.com/alan-turing-institute/the-turing-way/pull/2750>

## Examples of Research Infrastructure Roles

This initial list of examples of Research Infrastructure Roles that has been expanded as part of *The Turing Way* Hackathon Workshop at the [Big Team Science conference 2022](#).

- Community manager
- Project manager
- Research software engineer
- Research application manager
- Programme manager
- Data Steward
- X
- X
- X
- x
- x
- x

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# Discussion and Writing

- You'll each be added to a break-out room for **30 minutes** for three topics related to research infrastructure roles (RIRs).
  - **Room 1 – Sustainability:** How do you sustain/grow RIRs at your institution?
  - **Room 2 – Strategy:** How can you introduce RIRs to your institution?
  - **Room 3 – Personal Experiences:** What has your experience been working in/with RIRs?
- **Add 1/2/3 next to your name on Zoom to indicate your interest: we aim to keep the rooms as even as possible!**

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# Tips for success

- Use the shared pads to your advantage
  - documentation is everything!
    - Sustainability
    - Strategy
    - Personal Experiences
- We'll be adding your experiences here:  
<https://github.com/alan-turing-institute/the-turing-way/pull/2751>



Let's dive in!

# Overview



1. What is *The Turing Way*?
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# What we've accomplished



- Learned about *The Turing Way*
- Learned about Research Infrastructure Roles
- Contributed to the chapter on RIR
- Have a contribution in-progress!



🎉 Congratulations! 🎉



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# Live Demo

Can you think of other research infrastructure roles?

<https://github.com/alan-turing-institute/the-turing-way/pull/2750>

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- Community manager
- Project manager
- Research software engineer
- Research application manager
- Programme manager
- Data Steward
- X
- X
- X
- x
- x
- x

## Next steps

- Adding your work to this pull request:  
<https://github.com/alan-turing-institute/the-turing-way/pull/2751>
- Adding you to the contributor table:  
<https://github.com/alan-turing-institute/the-turing-way#contributors>
- Preview of edited RIR Chapter:  
<https://the-turing-way.netlify.app/collaboration/research-infrastructure-roles.html>

*Keep in touch with The Turing Way community!*

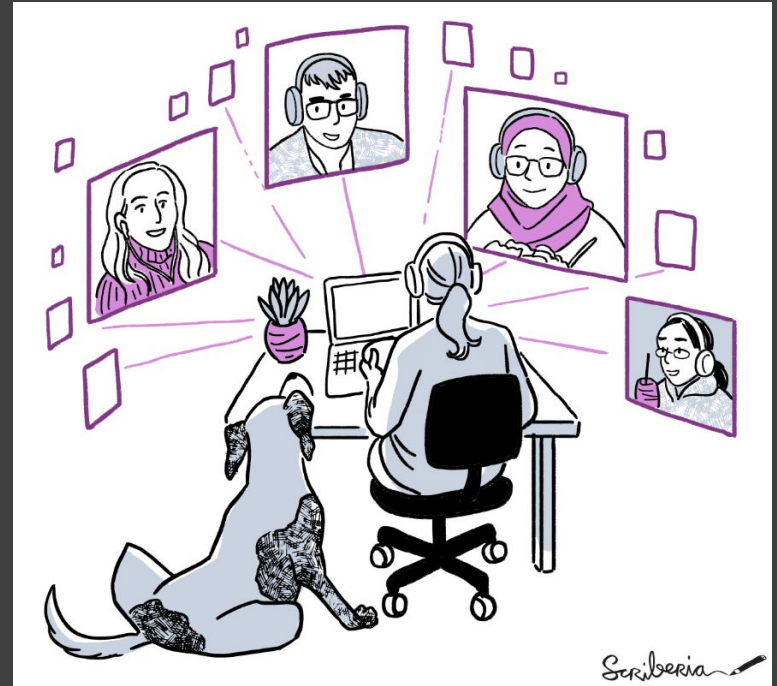


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# Join a community call

- *Collaboration Cafes*
  - 1<sup>st</sup> & 3<sup>rd</sup> Wednesdays (14:00-15:00 UTC)
- *Coworking Calls*
  - Mondays (10:00-11:00 UTC)
- *Office Hours*
  - Fridays (11:00 UTC)
- *...and more! Fireside Chat, Book Dash, Community Share-outs, trainings*

[bit.ly/turingway](https://bit.ly/turingway)



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# Fireside Chat:

## Monthly informal events

***Supporting* citizen and  
participatory science  
communities**

**28 October 2022  
4pm BST**



[bit.ly/turingway](https://bit.ly/turingway)

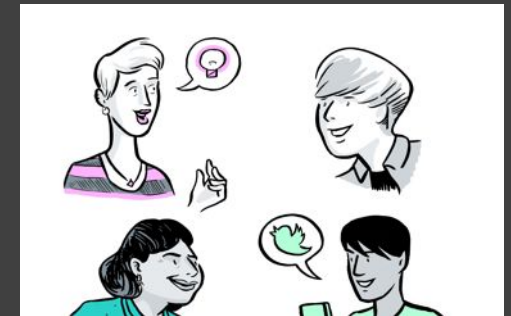
# Get Involved with *The Turing Way*



Develop & share



Maintain & improve



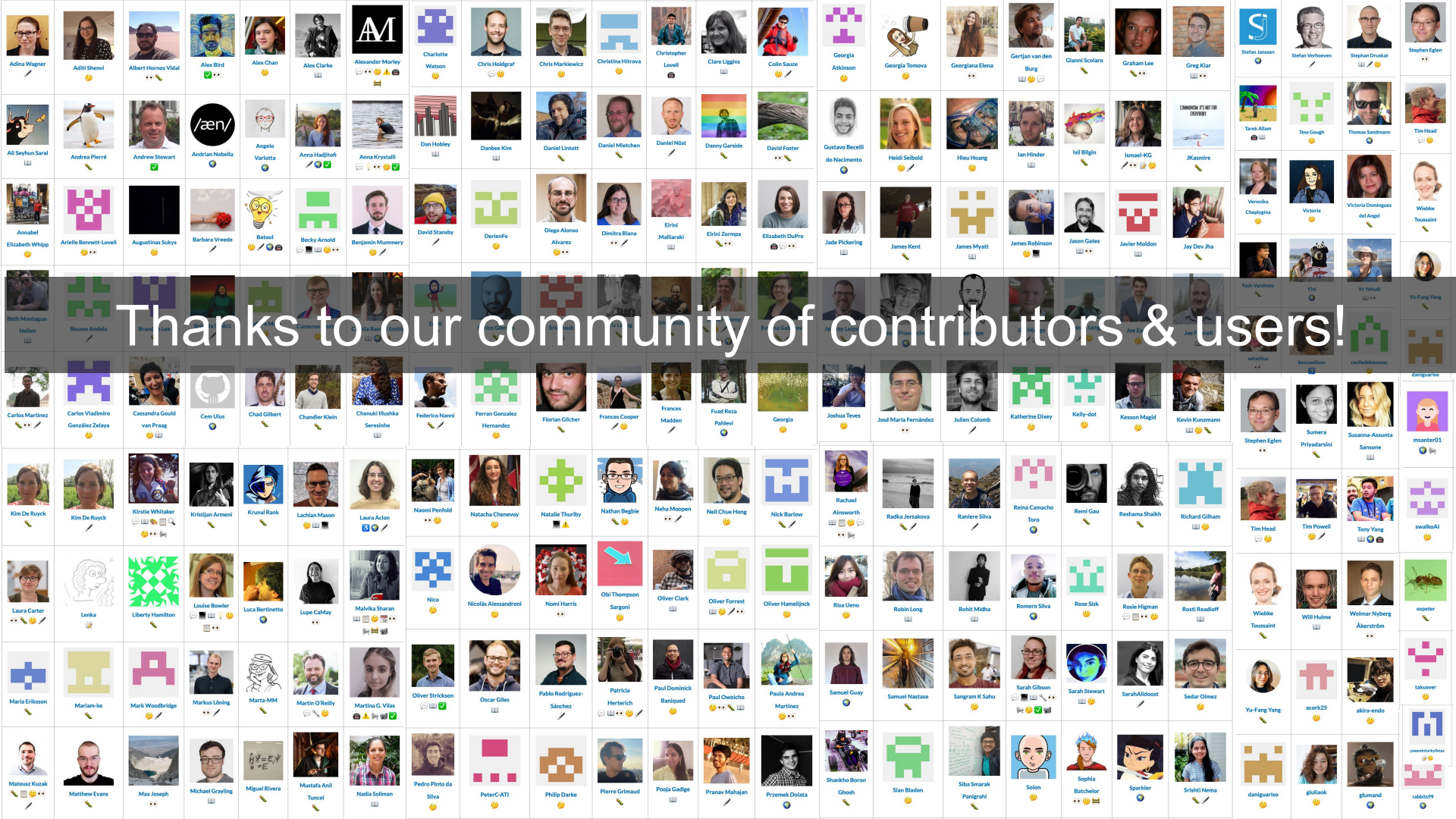
Review and update



Make it global



Share best practices



Thanks to our community of contributors & users!

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# The Alan Turing Institute

## Acknowledgements:

- The Turing Way team, Kirstie Whitaker, Malvika Sharan
- *The Turing Way* community, contributors & collaborators
- Book: [the-turing-way.netlify.com](https://the-turing-way.netlify.com)
- Twitter: [twitter.com/turingway](https://twitter.com/turingway)
- Newsletter: [tinyletter.com/TuringWay](https://tinyletter.com/TuringWay)
- Slack: [tinyurl.com/jointuringwayslack](https://tinyurl.com/jointuringwayslack)
- GitHub: [github.com/alan-turing-institute/the-turing-way](https://github.com/alan-turing-institute/the-turing-way)
- Original artwork by Scriberia: <https://doi.org/10.5281/zenodo.3332807>

