

The Alan Turing Institute

Co-creating The Turing Way with
global community

Malvika Sharan, Melissa Black, Esther Plomp

Pronouns: she/her/hers



The Turing Way

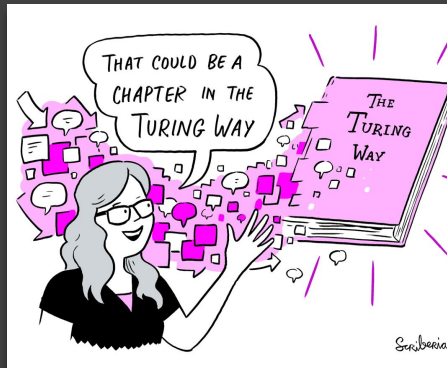
A community-led project on data science.

We are an open source, open collaboration and globally distributed community working together to **make data science accessible, reproducible and beneficial.**

The Turing Way

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Co-created Book



Community-based



Participatory process



Culture change

The Turing Way: Book on Reproducibility

Guide for Reproducible Research

- Overview
- Open Research
- Version Control
- Licensing
- Research Data Management
- Reproducible Environments
- BinderHub
- Code quality
- Code Testing
- Code Reviewing Process
- Reusable Code
- Continuous Integration (CI)
- Reproducible Research with Make
- Research Compendia



Fig. 3 The Turing Way project illustration by Scriberia. Used under a CC-BY 4.0 licence. DOI: [10.5281/zenodo.3332807](https://doi.org/10.5281/zenodo.3332807).

The Turing Way: Book on Reproducibility

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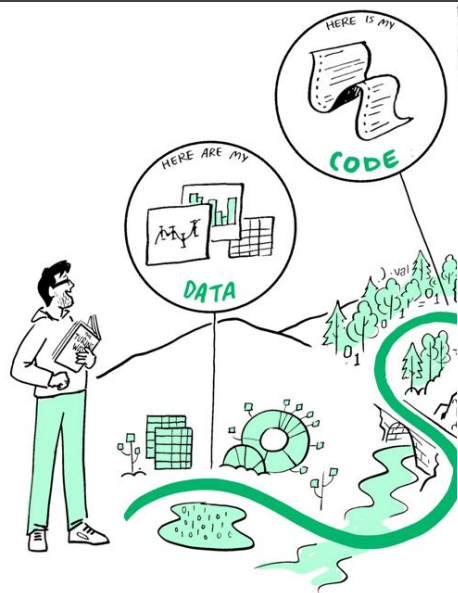
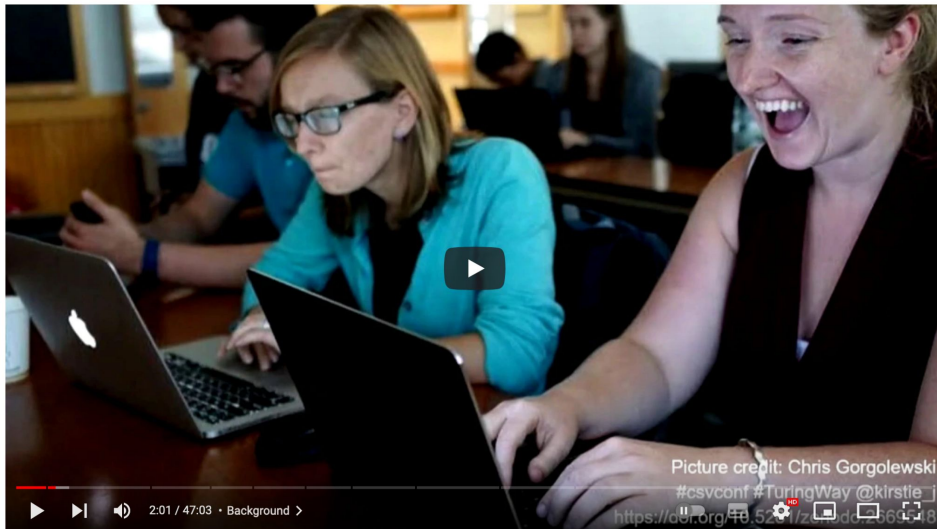


Fig. 3 The Turing Way project illustration by S
licence. DOI: 10.5281/zeno



<https://www.youtube.com/watch?v=wZeoZaIV0VE>



Day 2 Keynote - Kirstie Whitaker - csvconf

csvconf
909 subscribers

Subscribe

3

Share

Clip

Save

...

210 views 3 years ago

Dr Kirstie Whitaker delivers the closing keynote of csv.conf, titled: "The Turing Way: Sharing the responsibility of reproducibility"

Open and reproducible research along with good collaboration, communication and ethics should be seen as fundamental research methods.

@turingway, CC-BY 4.0, Zenodo: <https://zenodo.org/record/7849391>, CC-BY 4.0 Book: <https://the-turing-way.netlify.app>

The Turing Way: Guides on Data Science



Kirstie Whitaker

Director: Tools,
Practices & Systems
Programme (TPS)



Malvika Sharan

TPS Senior
Researcher: Open
Research & Community



Anne Lee Steele

Community Manager,
The Turing Way



Alexandra
Araujo Alvarez

Project Manager

4+ years

>260 Chapters

Numerous training
and community
resources.

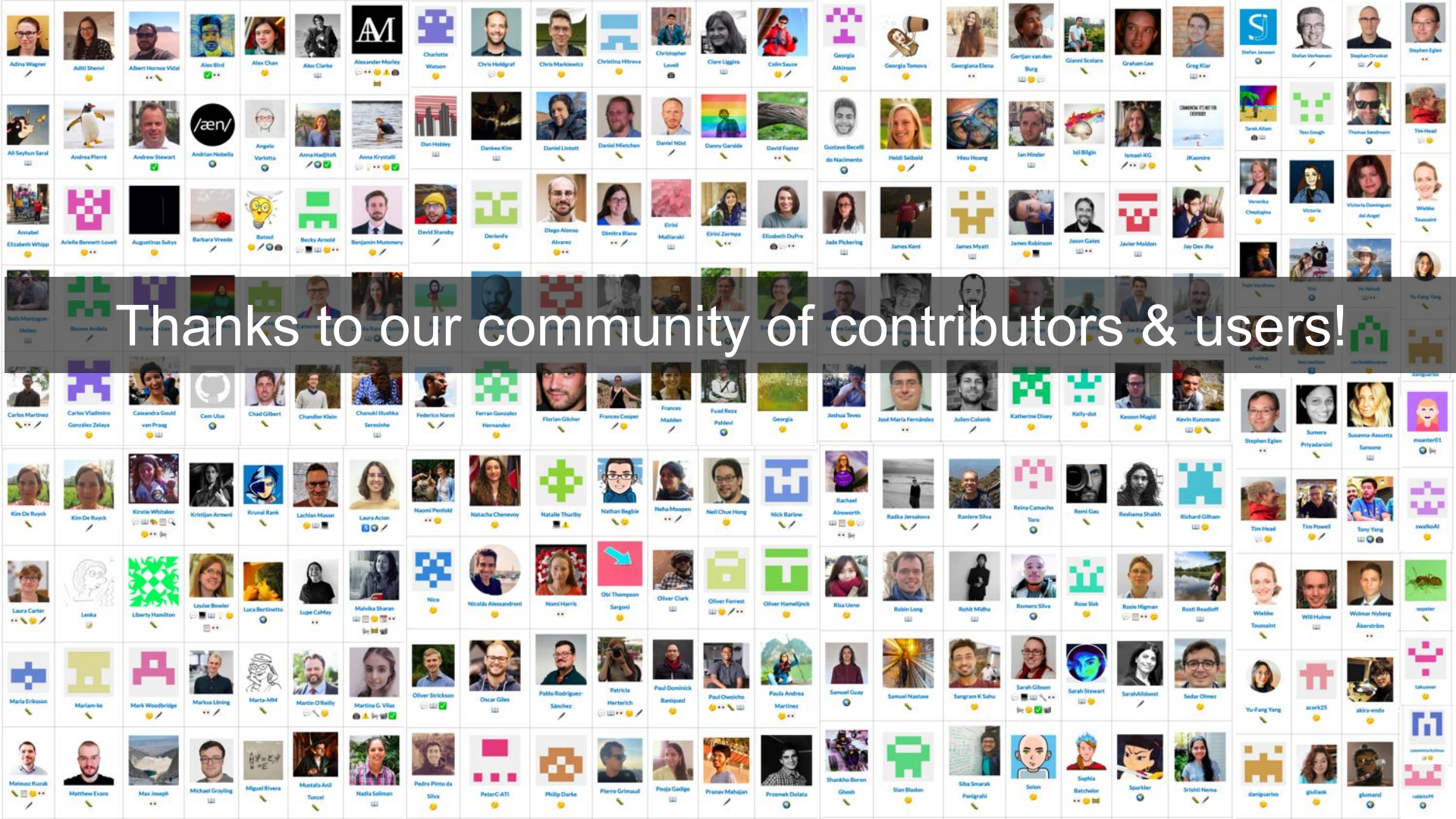


The Turing Way

🔍 Search this book...

Welcome

- Guide for Reproducible Research ▾
- Guide for Project Design ▾
- Guide for Communication ▾
- Guide for Collaboration ▾
- Guide for Ethical Research ▾
- Community Handbook ▾
- Afterword ▾



Thanks to our community of contributors & users!

Project Growth & Recognitions

- 425+ contributors, 3500+ monthly users - supported by 25+ core members (governance)
- 2 awards and engagement with 25+ orgs
- References in 40+ peer reviewed articles and 100s of publications, reports, policy documents
- Replication/extension by 3 Turing & 7+ external projects



Belongs to the community

This is **not** a Turing project - although it has great support from the Institute.

This is **always a work in progress** - evolving with the needs in the community.

We are creating community resources together -- **it's about the way, the journey, not a set of rules.**



Localisation & Translation

Will be presented by
Melissa Black

Research Infrastructure Roles

Will be presented by
Esther Plomp

Editors and Reviewers

Vicky Hellon, Jen Ding, Hari
Sood, Esther Plomp



Infrastructure Maintainers

Sarah Gibson, Jim Madge,
Danny Garside, Brigitta Sipőcz

Trainers and Mentors

Emma Karoune, Eirini Zormpa,
Alden Conner

Different PathWAYS
in The Turing Way

Practitioners Hub

Alexandra Araujo Alvarez, Jen
Ding, *Job Coming soon!*

Environmental Data Science

Alejandro Coca, Anne Fouilloux

Book Dash Planning

Team and term-based roles.



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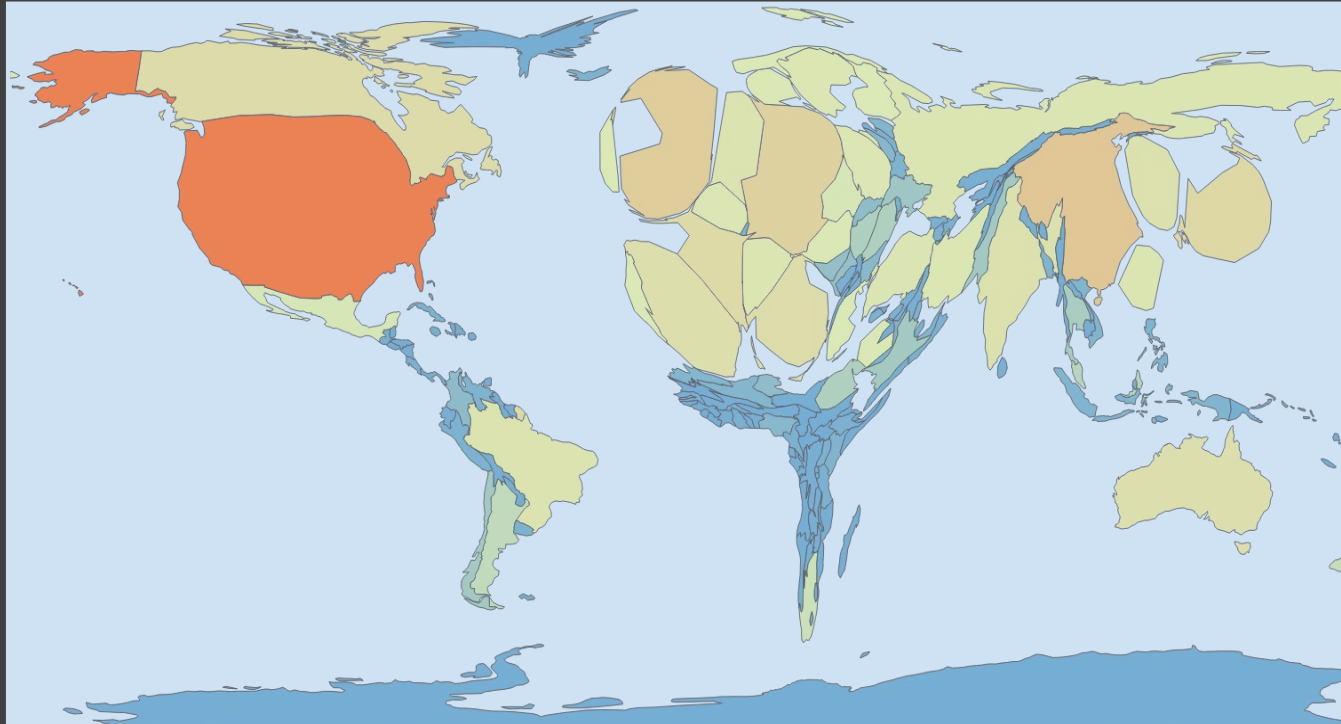


What does a resource for a global data science community look like?

- Language of “open science” materials is **primarily in English**
- What do best practices look like in **different cultural contexts**?
- How can *The Turing Way* truly become a **global resource**?



Unequal contribution and participation in Knowledge Production



World scaled by number of documents in Web of Science by authors living there, 2011 - data by Juan Pablo Alperin
https://figshare.com/articles/figure/World_scaled_by_number_of_documents_in_Web_of_Science_2012_by_Authors_Living_There/953177



unesco

Multilingualism in Open Science

*Language enables the delivery of information and **knowledge coded in different sociocultural, political, and economic contexts.***

“... an inclusive construct that combines various movements and practices aiming to **make multilingual scientific knowledge openly** available ...”

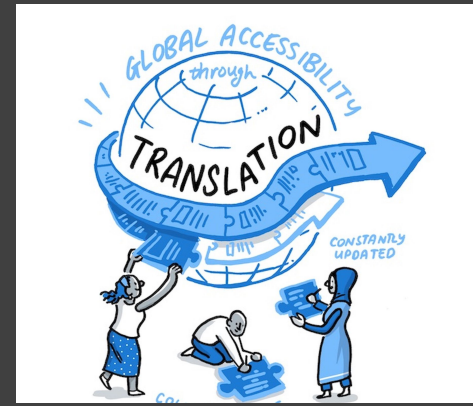
UNESCO definition of Open Science

“Development **and localisation** of training materials, i.e. making sure they are suitable for use in a **range of countries, regions or languages**, is a priority under the Recommendation...”

UNESCO toolkit for Building capacity for Open Science

Multilingualism and Internationalisation in Open Science

- Making science open requires diverse, **multilingual and locally relevant** research accessible for a wide audience.
- Open Science **has much to gain** and offer in engaging with **geolinguistic diverse** participants.
- **Internationalisation** allows open source/research projects to identify and support the needs of multiple locales.

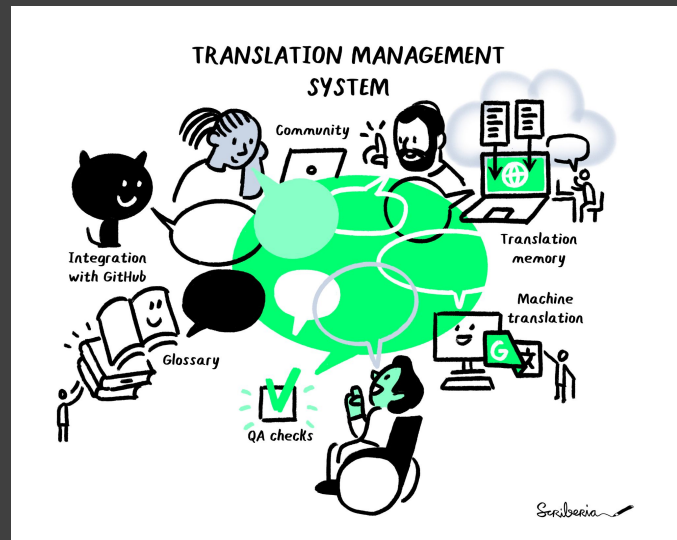


Localisation in The Turing Way

Recent **advances in translation technologies** has enabled the development of a multilingual dissemination system for Open resources.

A **Translation Management System (TMS)** manages the localisation process from the beginning until the finished translated product.

Sharing our **translation process and journey** has been crucial for involving new members and making their collaboration possible.



https://github.com/alan-turing-institute/the-turing-way

☰ README.md

The Turing Way

This README.md file is also available in Dutch ([README-Dutch](#)), French ([README-French.md](#)), German ([README-German.md](#)), Indonesian ([README-Indonesian](#)), Italian ([README-Italian](#)), Korean ([README-Korean](#)), Portuguese ([README-Portuguese](#)), and Spanish ([README-Spanish](#)) (listed alphabetically).

Governance of *The Turing Way* translation and localisation team



Batool Almarzouq



Andrea
Sánchez-Tapia



Alejandro Coca-Castro



Camila Rangel Smith



Melissa Black



Anil Tuncel



Cigdem Ozen



Asma Kacem

Translation & Localisation: Shared meetings and platforms

TWTranslation

Overview Repositories 7 Projects Packages People 2

Popular repositories

- the-turing-way** (Public)
Forked from alan-turing-institute/the-turing-way
Host repository for The Turing Way: a how to guide for reproducible data science
- translation_workflow** (Public)
3 stars
- TTW_spanish** (Public)
- Turkish-specific-Translation-rules** (Public)
Turkish-specific-Translation rules
1 star

LOG IN SIGN UP

OSCSA

Type Language Sort

reproducible data science

The Turing Way > Turing Way

Turing Way

OVERVIEW README

Search...

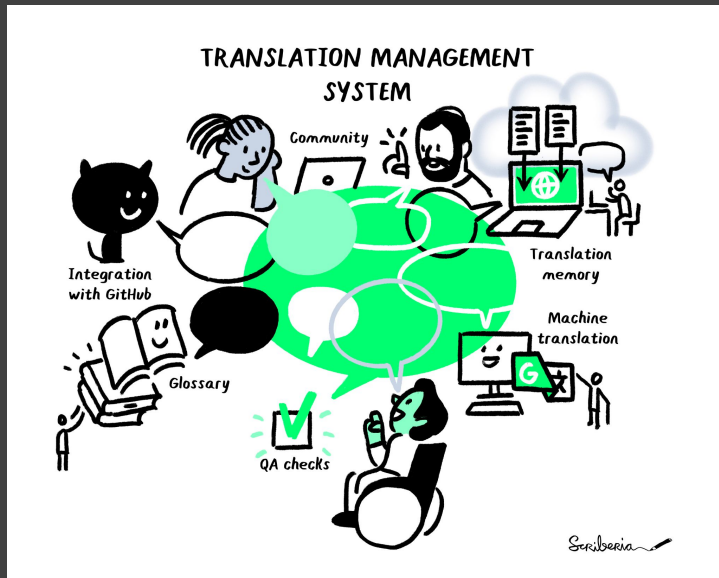
Language	Progress	Words to translate
Arabic (ar)	26% · 1%	200 950
Chinese Simplified (zh-CN)	15% · 0%	228 890
French (fr)	72% · 0%	75 680
Japanese (ja)	68% · 0%	87 125
Portuguese, Brazilian (pt-BR)	73% · 1%	71 221
Spanish, Latin America (es-419)	13% · 0%	235 653
Turkish (tr)	2% · 0%	268 587

Choose your 'Ways' towards localisation

You want to *convey open knowledge* to a wider community of non English speakers - join us!

Read our contribution guideline, translation priorities and choose your roles

- translator, proofreader, manager, infrastructure, documentation, reuse translation memory for your own project, onboard and support others!



Join our community on twitter: [@turingway](#), GitHub: <https://github.com/alan-turing-institute/the-turing-way>.

Book: <https://the-turing-way.netlify.app>, Images by The Turing Way community and Scriberia under CC-BY 4.0 License

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Team and term-based roles.

INCREASING IMPACT ON THE DECISION

INFORM

CONSULT

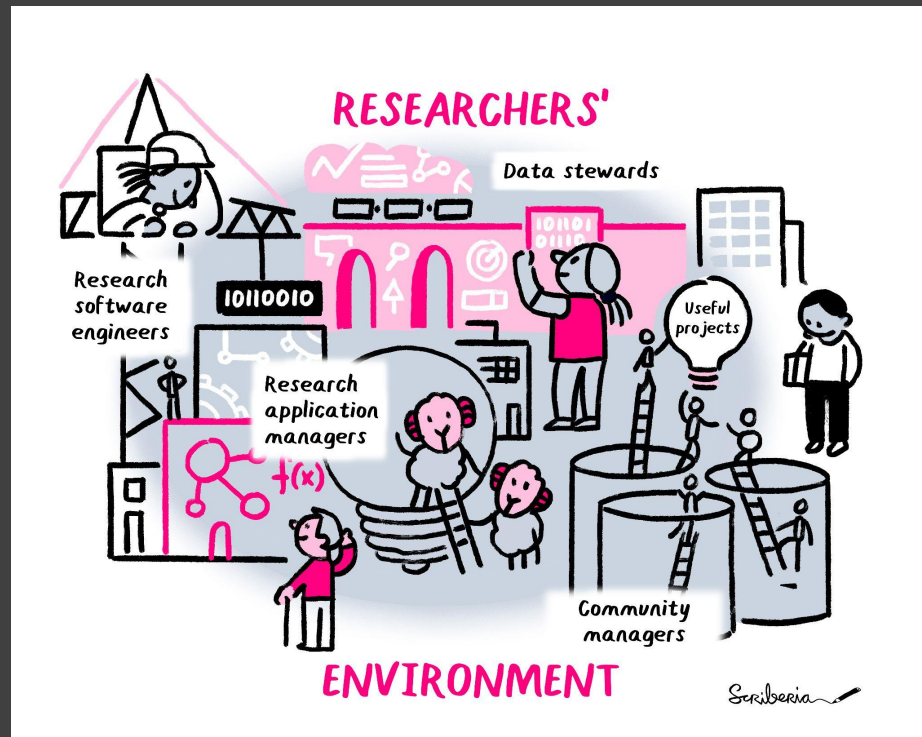
INVOLVE

COLLABORATE

EMPOWER

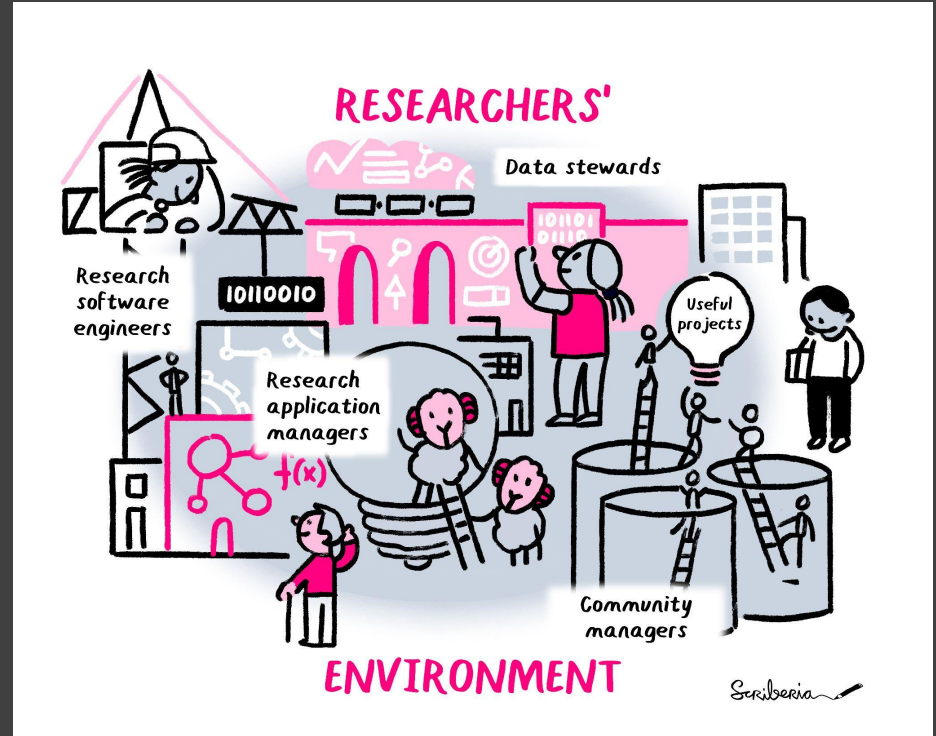
Research Infrastructure Roles

Successful research and scientific collaborations rarely occur without **facilitation, support and maintenance** of the work.



Research Infrastructure Roles

Research infrastructure roles provide specialised skills, expertise and services required to effectively carry out high-quality research.



Research Infrastructure Roles ^

Community Managers

Overview

Data Stewards Overview

Data Steward Personal Story

Data Wrangler Overview

Research Software Engineers
Overview

Research Software
Engineering Personal Story

Research Application
Manager Overview

Research Infrastructure
Developer Overview

Remote Collaboration v

Shared Ownership in Open
Source Projects v

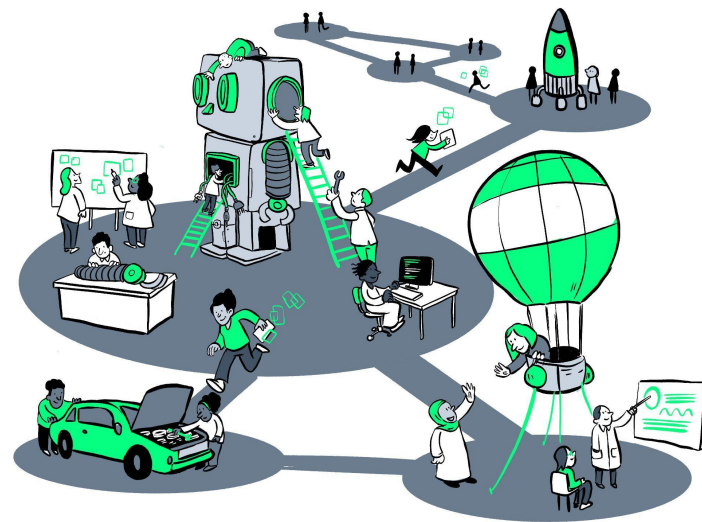
Guide for Ethical Research v

Community Handbook v

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
- Data wrangler
- Research infrastructure developer
- Partnerships development manager
- Grant application manager
- Community engagement lead
- Librarian
- Communications manager
- Events manager
- Participatory research manager



Research Infrastructure Roles

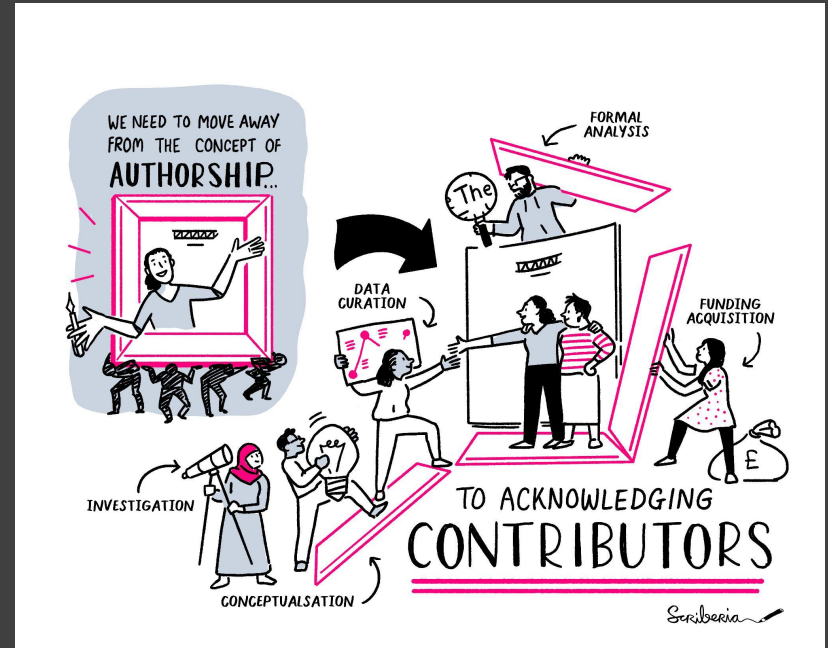
Changing research culture:
recognising all kinds of roles

UK Research and Development Roadmap

Attract, retain, develop the talented, diverse people and teams. Ensure that our science, research, innovation system is responsive to our society

Towards better recognition for Research Infrastructure Specialists (Australia)

Professional staff become more valuable with experience and need to be rewarded as such – otherwise they will go elsewhere. Australian universities need to improve how they reward and recognise this important cohort of specialists, and the NCRIS Project Directors are calling for a change in how [Research Infrastructure] specialists are classified.



Research Infrastructure Roles

Rewarding and recognising Team Infrastructure Roles



Arielle Bennett

Programme Manager

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abennett@turing.ac.uk



Esther Plomp

Data Steward

[@toothfairy](https://twitter.com/toothfairy)
e.plomp@tudelft.nl

*Preprint: A manifesto for
rewarding and recognising
Team Infrastructure Roles*
[https://doi.org/10.53962/knm3
-bnvx](https://doi.org/10.53962/knm3-bnvx)

Link to slides: <https://doi.org/10.5281/zenodo.7780819>

Recognition for all Contributors

Afterword

Glossary

Bibliography

Contributors Record

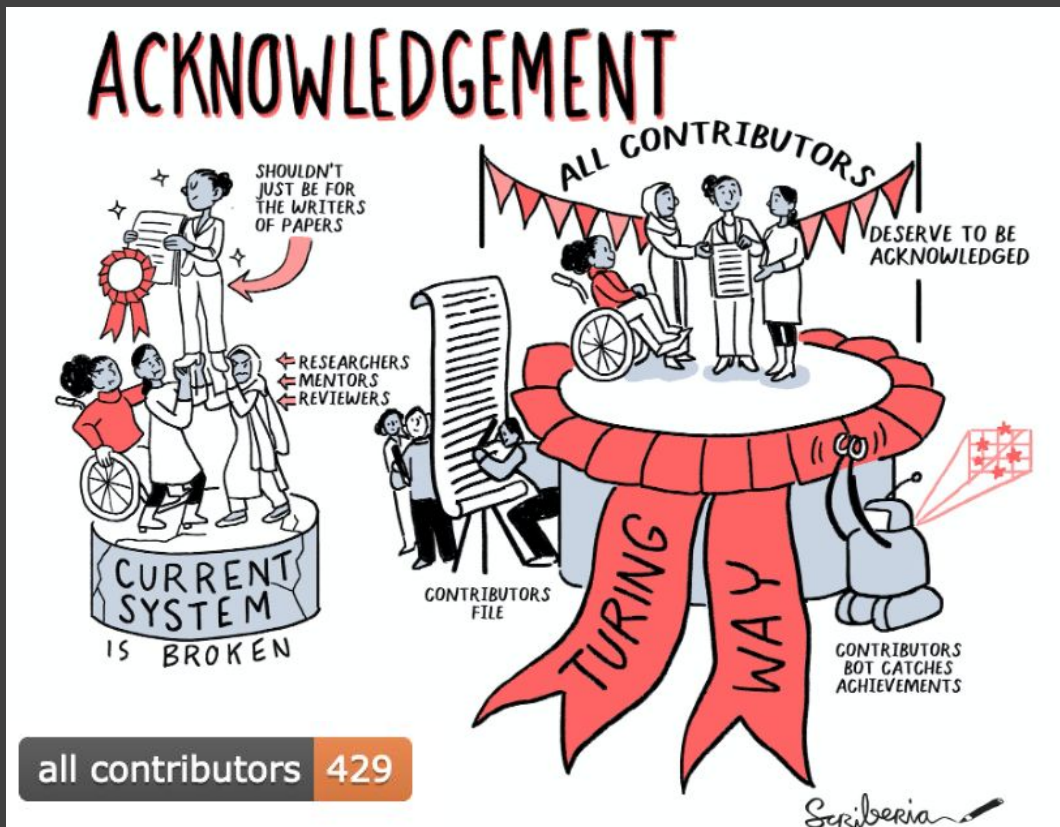


All Contributors

Recognize All Contributors

Including those that don't push code

Cite as: *The Turing Way Community*. (2022). *The Turing Way: A handbook for reproducible, ethical and collaborative research* (1.0.2). Zenodo. <https://doi.org/10.5281/zenodo.7625728>



all contributors 429

Many Pathways for Contribution



Develop



Maintain & improve



Share resources



Review and update



Make it global



Share best practices

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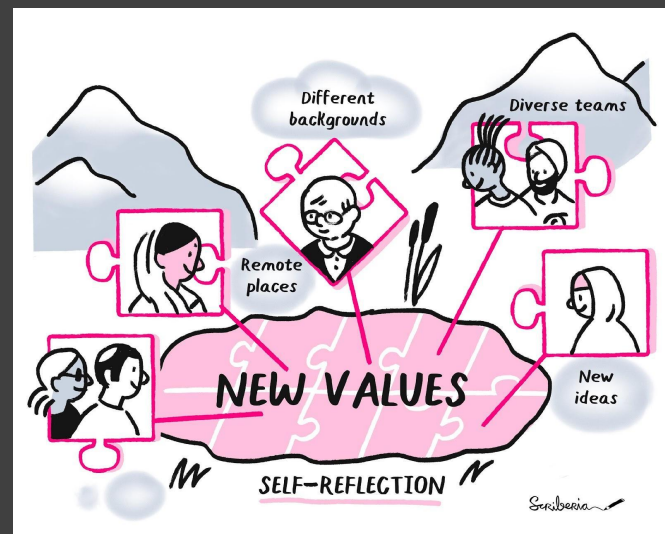
Start your journey, pave a new way: the-turing-way.start.page

The Turing Way Channels

- **Translation co-working:** Tuesday (16:00 UTC)
- **Collaboration Cafes**
 - 1st & 3rd Wednesdays (14:00 UTC)
- **Outreachy**
- **Book Dash:** May and November yearly



Your contribution is important - **we record and acknowledge** in the README file and in the book.



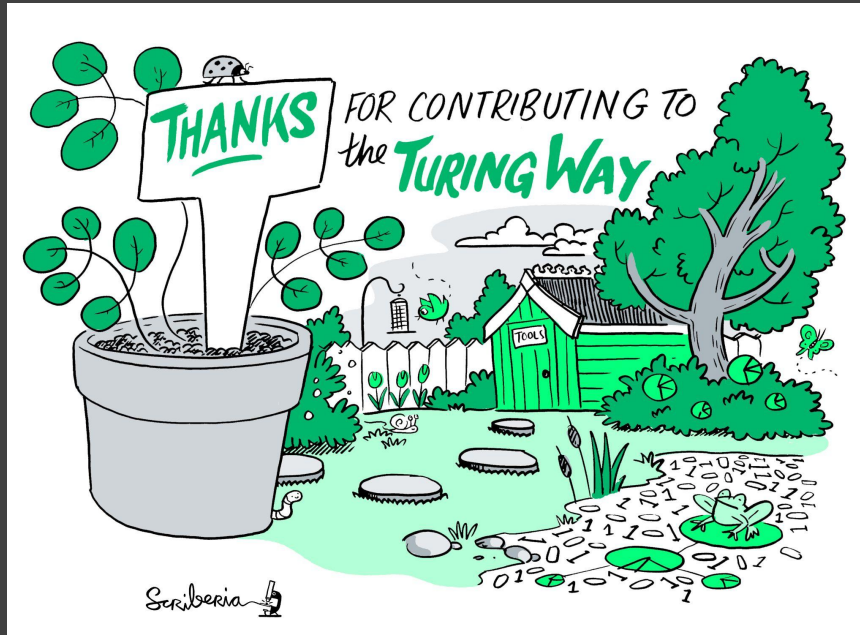
the-turing-way.start.page

Growing *The Turing Way*: moving at the speed of trust

- Shifting from a grassroots open science project to a **global collaboration takes intentional care**
- Working towards shifting mindset to **sustainability first** in infrastructure as well as environment.

Facilitating & maintaining in many WAYS





Move fast and break things

Collaborate, move slowly, maintain things

X

Acknowledgements & Links

The
Alan Turing
Institute

The Turing Way Community

- Localisation and Translation Team & Research Infrastructure Activists!
- Kirstie Whitaker, Anne Lee Steele, Alexandra Araujo Alvarez + many Turing Way Core Team and Turing's TPS team members
- **Book:** the-turing-way.netlify.com, **Twitter:** twitter.com/turingway
- **GitHub:** github.com/alan-turing-institute/the-turing-way
- **Useful links & opportunities are listed here:** <https://bit.ly/turingway>



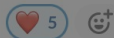
Slide reuses previous talks developed by several Turing Way members including Anne Lee Steele, Batool Almarzouq, Andrea Tapia Sanchez and Danny Garside.

Images used in this talk have been co-developed by Scriberia and The Turing Way community, shared under CC-BY 4.0. <https://zenodo.org/record/7587336>



Anne Lee Steele (she/her) 2 days ago

Just used the phrase "I'm the Community Manager of The Turing Way, an open source project and community that documents, maintains, and translates best practices in data science and AI." to describe The Turing Way to someone (my first time using this particular wording)... and it made me think of the one-liners we use to describe the project. What other one-liners do people use? How have they changed in the past few years?



What other one-liners do people use?

4 replies



Anne Lee Steele (she/her) 1 day ago

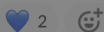
A few ones that come to mind are:

- "The Turing Way is an community-led handbook to best practices in data science"
- "The Turing Way aims to make reproducibility too easy not to do by collecting best practices into a collection of open source guides"
- "The Turing Way involves and supports a diverse community to make data science reproducible, ethical, collaborative, and inclusive for all" (taken from our default slide deck)



Malvika Sharan 1 day ago

Adding one more: The Turing Way is an open source handbook on reproducibility, we are a global community for everyone.



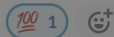
I say something different about The Turing Way every time I mention it! that the key is curating what I say to that particular listener!



KirstieJane 11 hours ago

I've been thinking about this question. I feel like I say something different about The Turing Way every time I mention it!

There's something about it being so many things that the key is curating what I say to that particular listener!



means different things and becomes what they do. #FeatureNotABug?



Malvika Sharan 9 hours ago

Based on the "way" of the Turing Way that people take, it means different things and becomes what they do. #FeatureNotABug? 🤖 (edited)

