

The Alan Turing Institute

The Turing Way:

Creating visible roles and recognitions
for maintainers in our community

Malvika Sharan

Pronouns: she/her



The Turing Way

An Open Source guide on Data Science.

*We involve and supports a **diverse community** to make research **reproducible, ethical, open and inclusive** for everyone.*



The Alan Turing Institute

The national institute
for data science and
artificial intelligence



Tools, Practices and Systems

- Trustworthy systems
- Transparent reporting
- Inclusive interoperable design
- Ethical integrity
- Respectful co-creation
- Leadership in open research



The Turing Way Book on Reproducibility



Kirstie Whitaker

Director: Tools, Practices & Systems Programme (TPS)



Malvika Sharan

TPS Senior Researcher:
Open Research & Community

The Turing Way is a lightly opinionated guide to reproducible data science.

Our goal is to provide all the information that researchers need at the start of their projects to ensure that they are easy to reproduce at the end.

This also means making sure PhD students, postdocs, PIs, and funding teams know which parts of the "responsibility of reproducibility" they can affect, and what they should do to nudge data science to being more efficient, effective, and understandable.

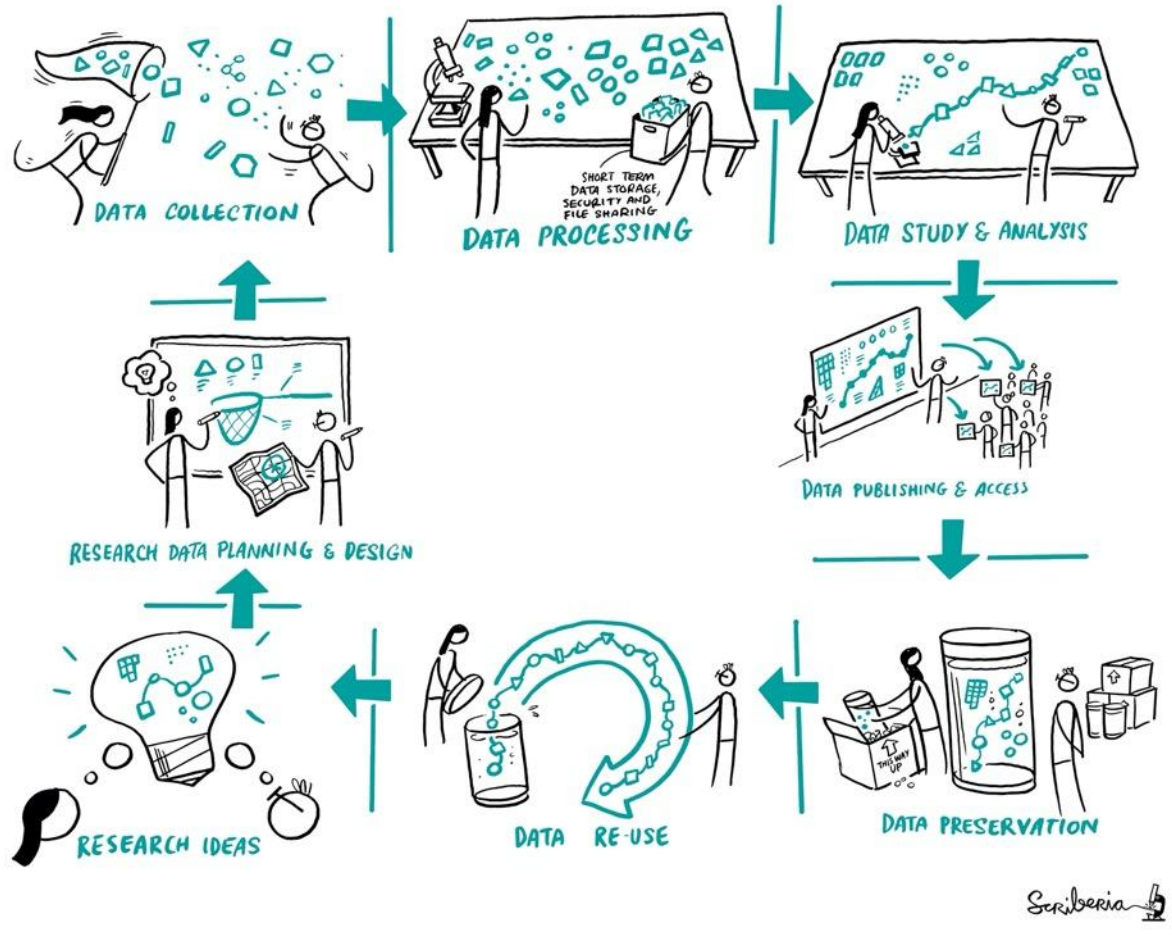


Reproducibility

		Data	
		Same	Different
Analysis	Same	Reproducible	Replicable
	Different	Robust	Generalisable

Reproducibility

		Data	
		Same	Different
Analysis	Same	Reproducible	Replicable
	Different	Robust	Generalisable



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

🔍 Search this book...

Welcome

Guide for Reproducible
Research

Guide for Project Design

Guide for Communication

Guide for Collaboration

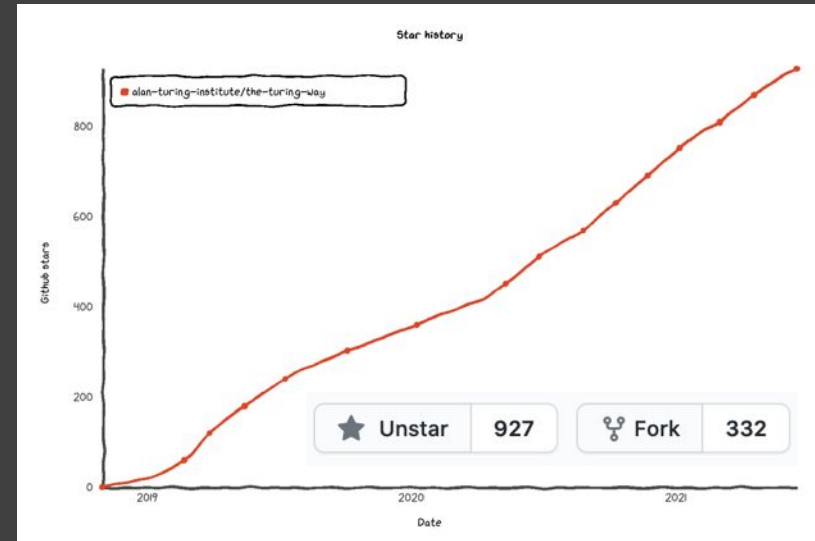
Guide for Ethical Research

Community Handbook



Project and Community Growth

- 3 years, >200 Live Chapters
- Community resources, events, guidance, templates, training
- 320+ direct GitHub contributors and thousands of users



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

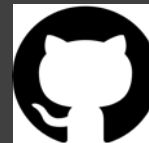


8,145

👁 views

10,267

📄 downloads



Open Science Community

- Everyone can freely read, reuse, distribute, modify and advance.
- Framework for collaboration, peer production and project sustainability.



Open Science Community Building

Process of **granting access to skills and support** that an individual or a group needs to participate in a community, and influence decision-making.



Identifying Maintainers

1. **Core:** Highly invested
2. **External:** Experts who actively engage due to shared interests
3. **Peripheral:** Users, have a lot to share but don't know where to start

Lave, Jean; Wenger, Etienne (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press. ISBN 978-0-521-42374-8.



Identifying Maintainers



Measurable outcome

Identifying Maintainers



Product



reproducible
accessible
scientific rigor
ethical aspect

Quality Assurance

Identifying Maintainers



Product



reproducible
accessible
scientific rigor
ethical aspect



development
testing
documentation
archiving
communication

Sustainability

Identifying Maintainers



Product



reproducible
accessible
scientific rigor
ethical aspect



development
testing
documentation
archiving
communication



1:1 support
delegation
training & skills
mentoring
review
feedback
promotion

Support system

Identifying Maintainers



Product



reproducible
accessible
scientific rigor
ethical aspect



development
testing
documentation
archiving
communication



1:1 support
delegation
training & skills
mentoring
review
feedback
promotion



Inclusive culture,
value exchange,
positive interaction,
funding & support,
diversity efforts,
onboard & offboard,
policy & guidelines,
accessibility,
engagement,
transparent reports,
governance,
opportunities,
mental health...

Community Care

The Turing Way: Community Care



Resources

Measurable outcome



Shared
Vision &
goals for the
book &
community

Quality Assurance



- GitHub
- open source infrastructure
- development
- processes & platforms

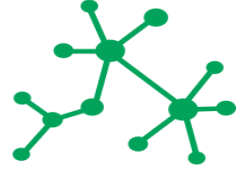
Sustainability



Community Care:

- transparent communication
- community handbook
- shared ownership
- value exchange
- meaningful incentive structure

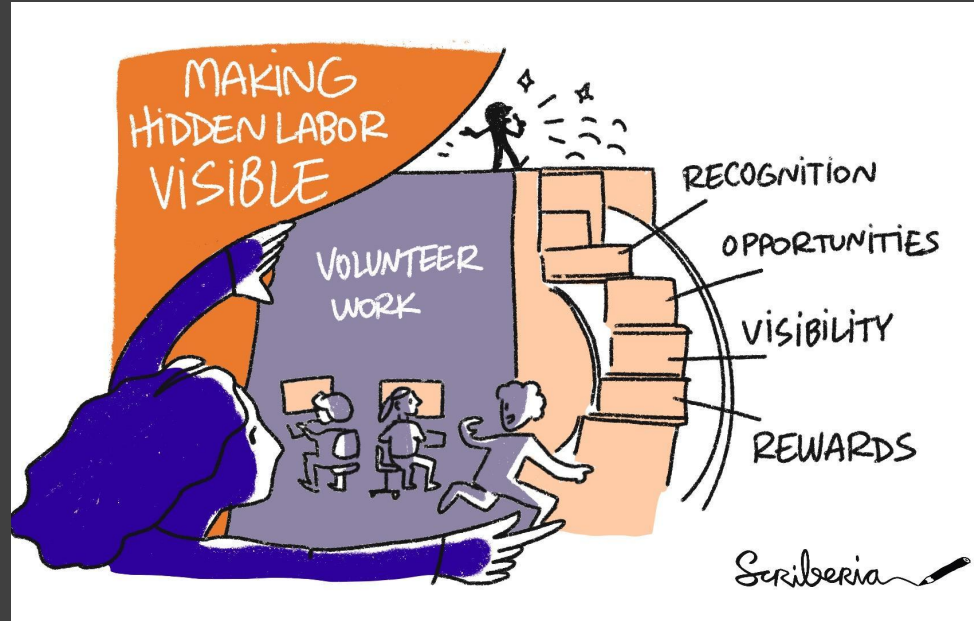
Support system



Community Care

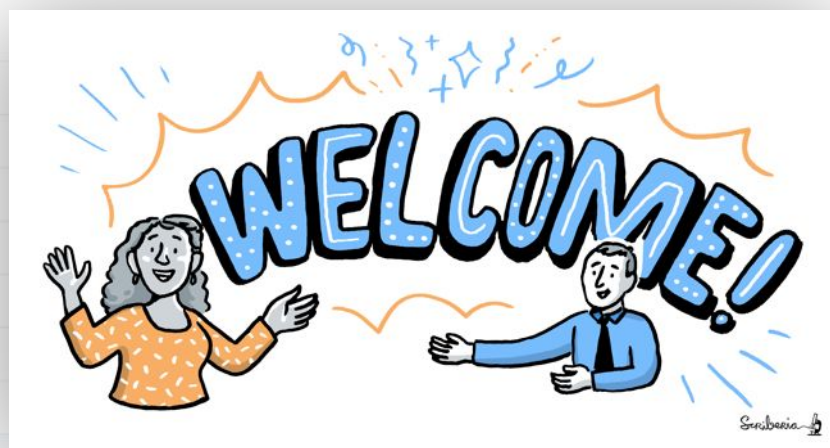
Making Hidden Work Visible

1. **Core:** Project leads and core contributors
2. **External:** Volunteers as community leaders
3. **Peripheral:** readers, users, participants



Lave, Jean; Wenger, Etienne (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press. ISBN 978-0-521-42374-8.

📁 .github	Remove prettier configuration	
📁 book	minor update	
📁 communications	Fix typos	
📁 conferences	Add KW formatting pedantry	
📁 project_management	Update online-collaboration-cafe.md	
📁 templates	Updating Github templates	
📁 tests	Add "et cetera" as a deprecated Latinism	
📁 workshops	Remove mis-pasted text	
📄 .all-contributorsrc	Merge pull request #991 from alan-turing-institute/all-contributors/a...	5 days ago
📄 .gitignore	ignore pptx in workshop folder	9 months ago
📄 .travis.yml	add html-proof file again	last month
📄 CODE_OF_CONDUCT.md	her -> their	6 months ago
📄 CONTRIBUTING.md	Update CONTRIBUTING.md	2 months ago
📄 GOVERNANCE.md	Read through months later	5 months ago
📄 LICENSE.md	Fix typo in licence	2 months ago
📄 README.md	Merge pull request #991 from alan-turing-institute/all-contributors/a...	5 days ago
📄 book_skeleton.md	Update book_skeleton.md	13 months ago
📄 contributors.md	Add myself to contributors.md	11 months ago
📄 tips_and_tricks_survey.md	Update tips_and_tricks_survey.md	14 months ago
📄 ways_of_working.md	Adjust team contact section	5 months ago



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

Kirstie Whitaker (@KirstieJane)	PI, The Alan Turing Institute	-
Malvika Sharan (@malvikasharan)	Co-lead investigator, The Alan Turing Institute	-
Anne Lee Steele (@aleesteele)	The Turing Way Community Manager, The Alan Turing Institute	100%
Emma Karoune (@EKaroune)	Senior Community Manager, The Alan Turing Institute	5%
Arron Lacey (@arronlacey)	Senior Community Manager, The Alan Turing Institute	10%
Achintya Rao (@RaoOfPhysics)	Community Manager, The Alan Turing Institute	10%
Vicky Hellon (@vhellon)	Community Manager, The Alan Turing Institute	10%
Aida Mehonic (@AidaMehonic)	Research Application Manager, The Alan Turing Institute	10%
Alden Conner (@aldenc)	Research Application Manager, The Alan Turing Institute	10%
Arielle Bennett (@Arielle-Bennett)	Project Manager, The Alan Turing Institute	10%
Jennifer Ding (@dingaaling)	Research Application Manager, The Alan Turing Institute	10%

The Alan Turing Institute

Tools, practices and systems

Building open source infrastructure to empower a global, decentralised network of people who connect data with domain experts

- Leadership
- Core team members in paid positions

<https://www.turing.ac.uk/research/research-programmes/tools-practices-and-systems>,
https://github.com/alan-turing-institute/the-turing-way/blob/main/ways_of_working.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).

Total Contributors:

all contributors 324

All Contributors

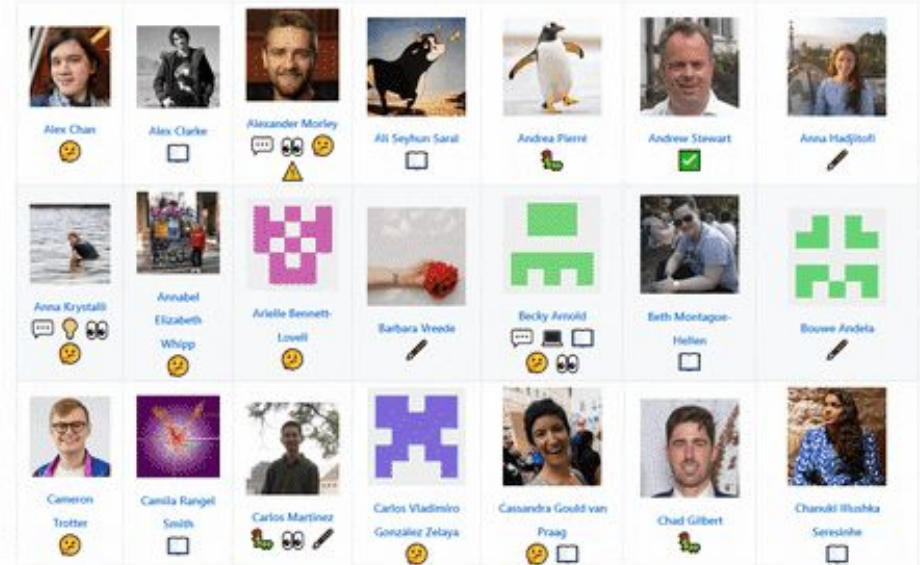
Recognize All Contributors

Including those that don't push code



Contributors

Thanks goes to these wonderful people (emoji key):



Creating Opportunities for Connections



*Co-working Calls &
Collaboration Cafés*

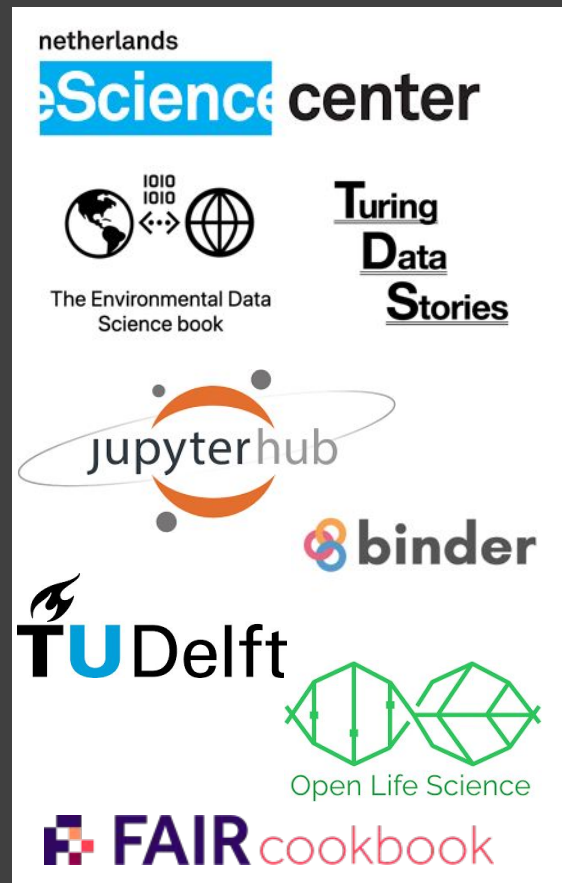


Book Dash Events

Collaborating Projects

Carlos Martinez-Ortiz (@c-martinez)	RSE community manager, Netherlands eScience Center	in-kind contribution
Esther Plomp (@EstherPlomp)	Data Steward, Faculty of Applied Sciences at Delft University of Technology	in-kind contribution
Sarah Gibson (@sgibson91)	Open Source Infrastructure Engineer, 2i2c & JupyterHub Community Development	in-kind contribution
Callum Mole (callummole)	Research Software Engineer, The Alan Turing Institute	Turing Binder Federation Membership - Project Contact

Core team members from partner
projects (in-kind contributions)

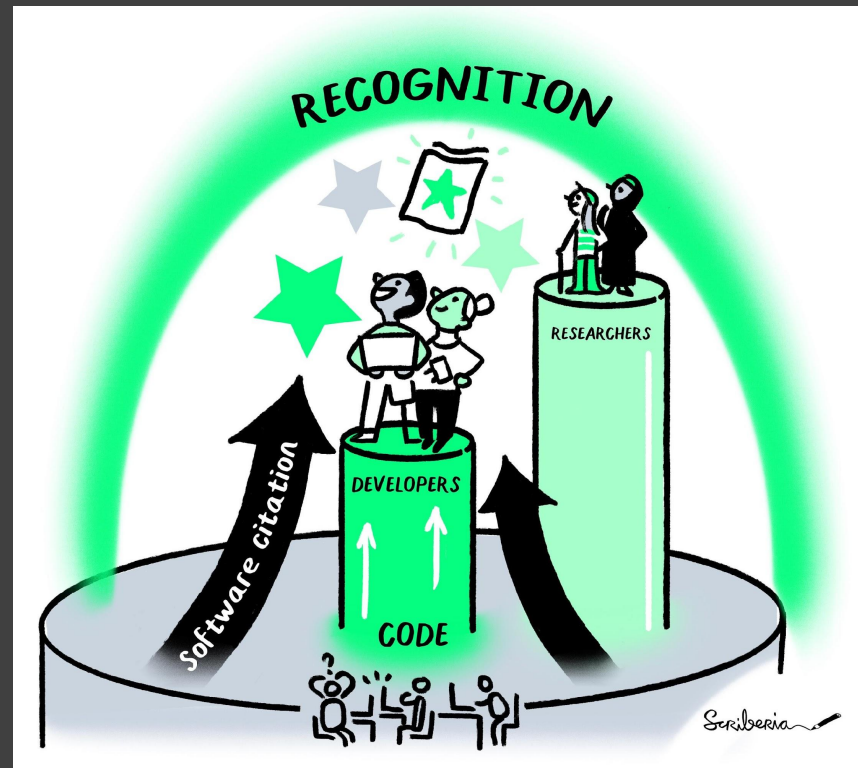


Participation in Open Science

Open is by default not:

- Inclusive
- Accessible
- Community-led

Intentional designing



Every contribution counts
The Turing Way fosters a
culture of collaboration



moz://a

Open
Leadership

Pathways for Collaboration



Develop & share



Maintain & improve



Share resources



Review and update

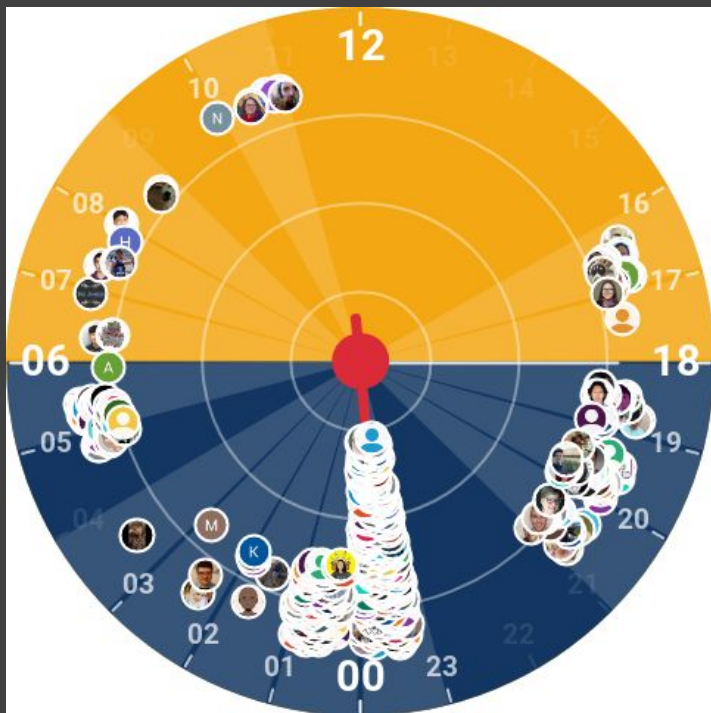


Make it global



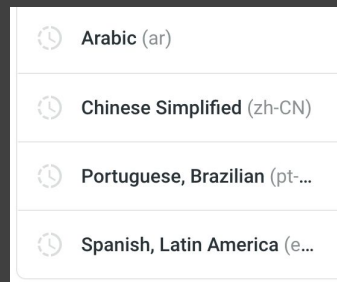
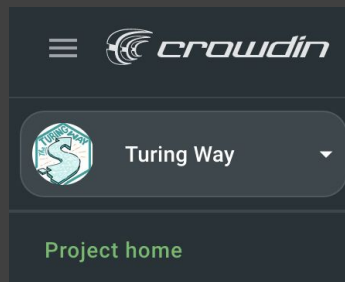
Share best practices

Global Collaboration: Translation & Contextualisation

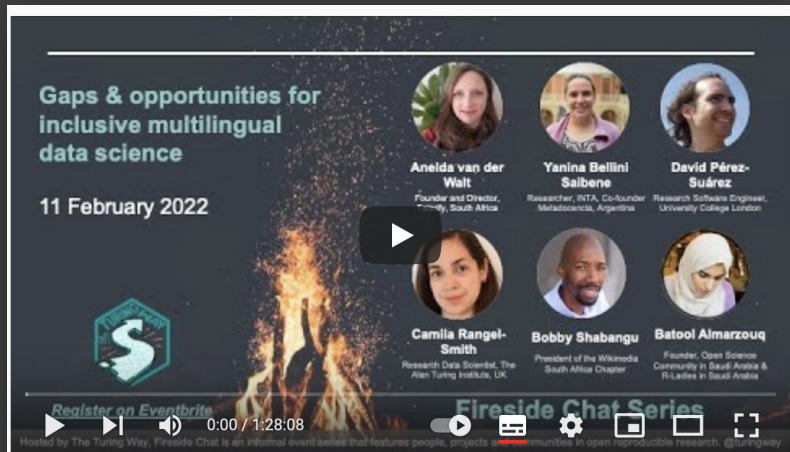


all contributors 322

Camila Rangel-Smith (crangelsmith)	Senior Research Data Scientist, The Alan Turing Institute	The Turing Way Translation and Localisation Co-Lead
Batool Almarzouq (BatoolMM)	Postdoctoral Researcher, KAIMRC and Honorary Research Fellow, The University of Liverpool	The Turing Way Translation and Localisation Co-Lead
Alejandro Coca Castro (acocac)	Postdoctoral Research Associate, The Alan Turing Institute	The Turing Way Translation and Localisation Co-Lead
Andrea Sánchez-Tapia (AndreaSanchezTapia)	Independent researcher	The Turing Way Translation and Localisation Co-Lead



Global Collaboration: Translation & Contextualisation



Fireside Chat | Inclusive multilingual data science | Anelda, Yanina, David, Camila, Bobby, Batool

Open-Science-Community-Saudi-Arabia / localisation Public

generated from Open-Science-Community-Saudi-Arabia/Template

<> Code Issues 2 Pull requests 3 Actions Projects Wiki Security Insights

🎉 Outreachy spring 2022: Applicants tasks/contributions #1

🕒 Open BatoolMM opened this issue 25 days ago · 64 comments

👤 BatoolMM commented 25 days ago · edited · Member

Welcome Outreachy 2022 Contributors! We're excited that you're here

This ticket will serve as the central point tracking the contributions of perspective Outreachy (spring 2022 cohort) applicants.

Outreachy provides paid remote, three-month internships to support diversity in Free and Open Source Software (FOSS). For more information about what Outreachy is, follow [this link](#).

Outreachy internships are:

- 💰 Paid - \$7,000 USD total internship stipend
- 🌐 Remote - both interns and mentors work remotely
- 📅 3 months - internships run May to August.

For those interested, this process is described [here](#).

Assignees
No one assigned

Labels
[good first issue](#)

Projects
None yet

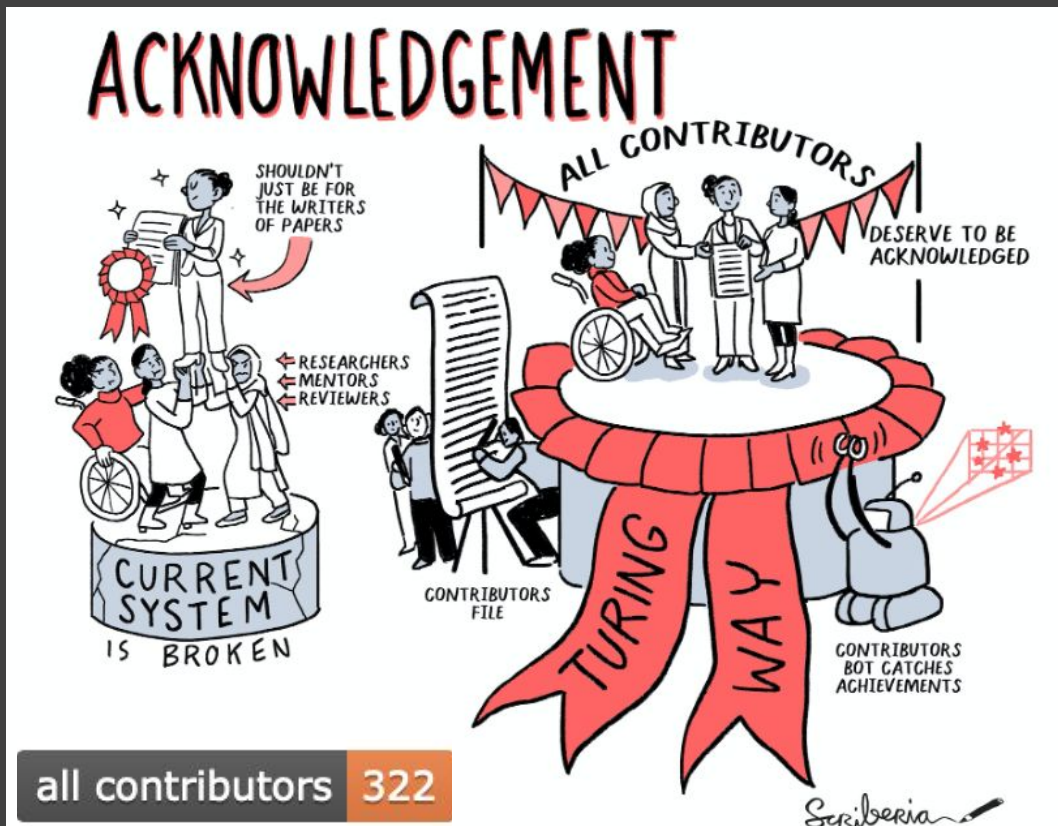
Milestone
No milestone

Development
No branches or pull requests

<https://github.com/Open-Science-Community-Saudi-Arabia/localisation/issues/1#issuecomment-1100303321>

Fireside Chat on multilingual data science: <https://www.youtube.com/watch?v=Ydogg2tQlJA>

Recognition for all Contributors



all contributors 322

Record of Contributions

Personal Highlights from *The Turing Way* Contributors

A

Achintya Rao

Alejandro Coca

Alexander Morley

Andrea Sanchez Tapia

Andreea Avramescu

Ankur Kumar

Anna Krystalli

Arielle Bennett

Collaborating Organisations and Projects

Delft University of Technology - Faculty of Applied Sciences
Netherlands eScience Center
FAIR Cookbook
Open Life Science
Remote Computational Project Resource

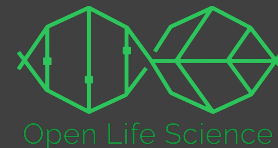
Cite as: *The Turing Way Community*. (2021). *The Turing Way: A handbook for reproducible, ethical and collaborative research* (1.0.1). Zenodo. <https://doi.org/10.5281/zenodo.5671094>

Ensuring Recognition & Credit

Creating equitable opportunities for community leadership without trying to fit The Turing Way into a traditional credit system.



Open Governance for Democratic Decision-Making



open-life-science / ols-5 Public

generated from open-life-science/ols-4

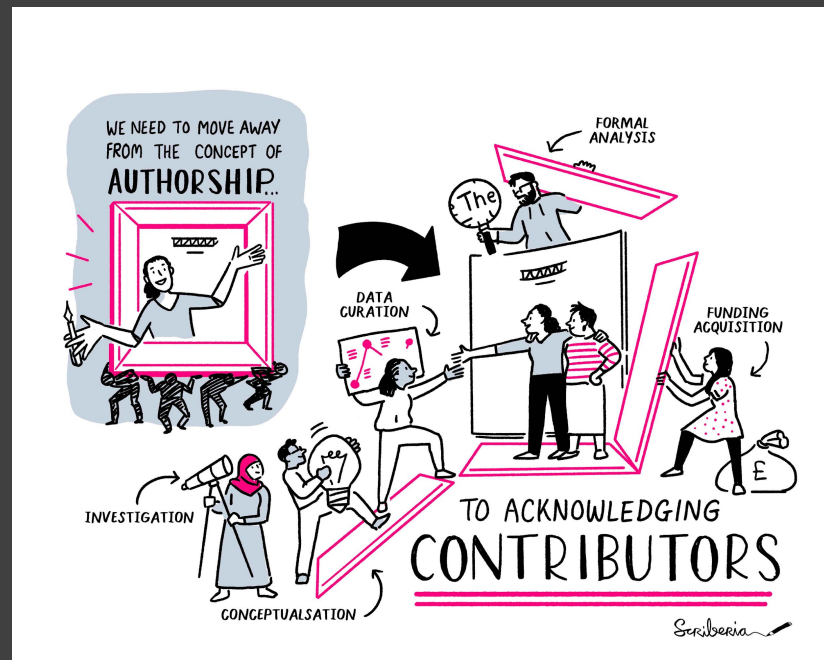
<> Code Issues 25 Pull requests 1 Discussions Actions Projects

Open Governance Models #31

Open 22 of 39 tasks aleesteele opened this issue 14 days ago · 3 comments

aleesteele commented 14 days ago · edited by malvikasharan

Project Name: "Exploring "Governance Models" for Open Science community projects as per their maturity stage"



Community Research: Learning About The Turing Way

Open

2 tasks

aleesteele opened this issue 14 days ago · 2 comments



aleesteele commented 14 days ago · edited

Collaborator

NOTE: This issue is a work in progress. Language, wording, questions, and content may change in the coming weeks.

Community Research: Learning about The Turing Way

Summary

Over the next number of months, my aim is to get to know The Turing Way community, and the Turing Way project. Because I'm a relative newcomer into the world of open science, this means that I'm not only trying to learn about *how* and *why* people contribute to the The Turing Way... but also *how* and *why* people participate in open science more broadly.

From this project, I hope to develop methodologies and ways of working that could be applicable in other contexts and with other communities (open or closed?). You will hopefully be able to find some of these resources in either the [open community building repo](#) (a kind of meta-team at the Alan Turing Institute, composed of other community managers like me!) or in the [personal repo](#) I'm making for this project.



The Turing Way Community Handbook

Community Handbook

Code of Conduct

Ways to Enter the Project

Style Guide

Maintaining Consistency

Chapter Templates and

Contribution Workflow

Acknowledging Contributors

Monthly Newsletters

Book Dash Events

Community Coworking Calls

Template Collection





Book:
the-turing-way.netlify.app/

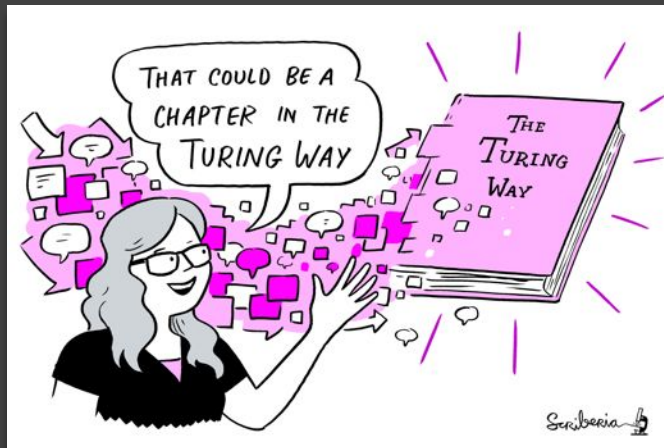
GitHub:
github.com/alan-turing-institute/the-turing-way

Twitter:
twitter.com/turingway

Email:
theturingway@gmail.com

CC-BY 4.0, The Turing Way

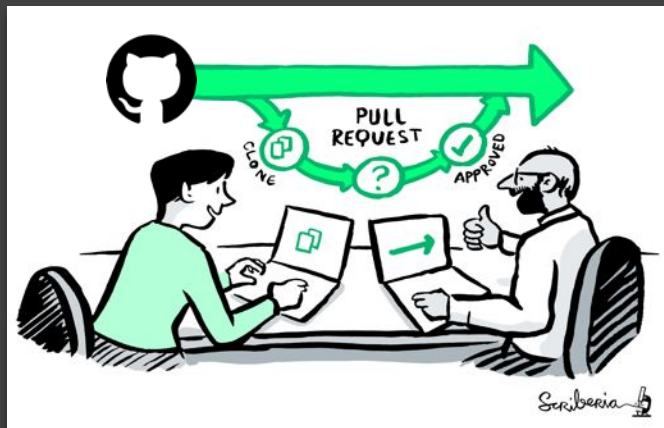
A Book with Five guides



A Community

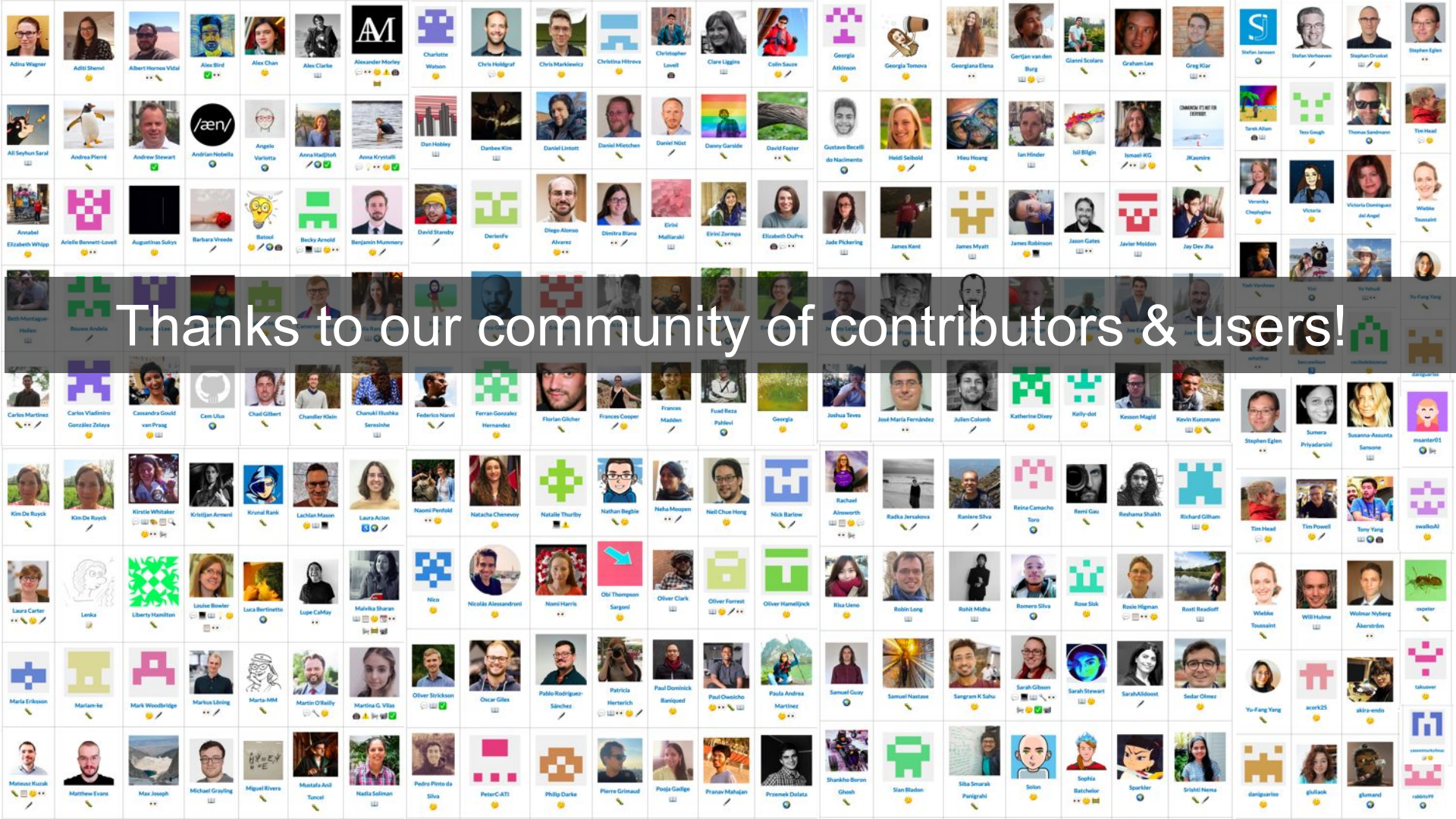


An Open Source Project



A Culture of Collaboration



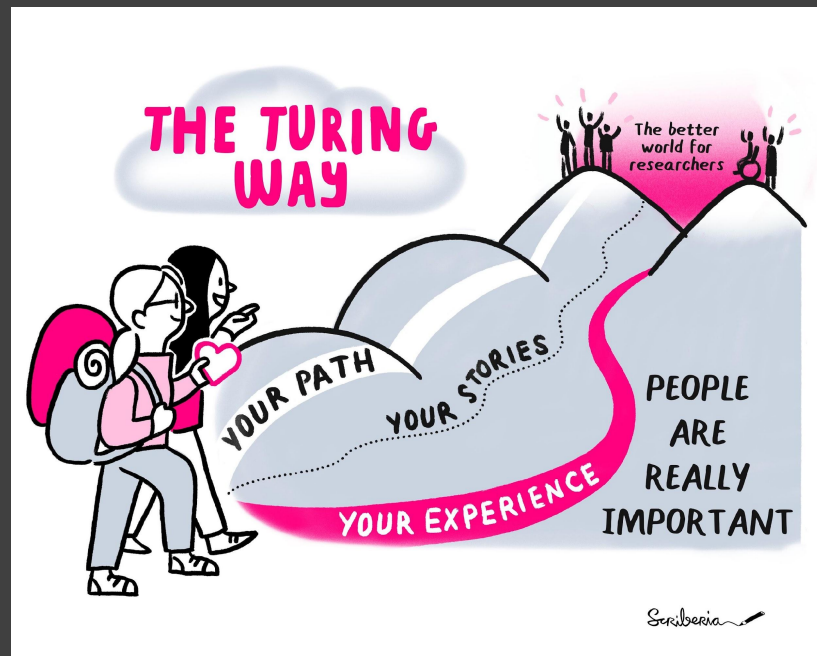


Thanks to our community of contributors & users!

Meeting you where you are!

- i. Join the community
- ii. Learn a new skill
- iii. Share your skills
- iv. Collaborate with others
- v. Mentor others' contributions
- vi. Represent this community

We value your participation!



Fireside Chat: 29 April

Making Virtual Participation a Global Default

Chaired by Dorothea Hug Peter and Anne Lee Steele, this panel will feature insights from Elio Campitelli, Lilly Winfree, Gilbert Beyamba, Ben Krikler.

bit.ly/turingway



Book Dash: 16-20 May

- Less intense version of Book Sprints
- Flexibly attend 2.5 hours collaborative session
- Community Share outs on 20 May
- Accessibility and participation grants
- Social events and collaborations

bit.ly/turingway



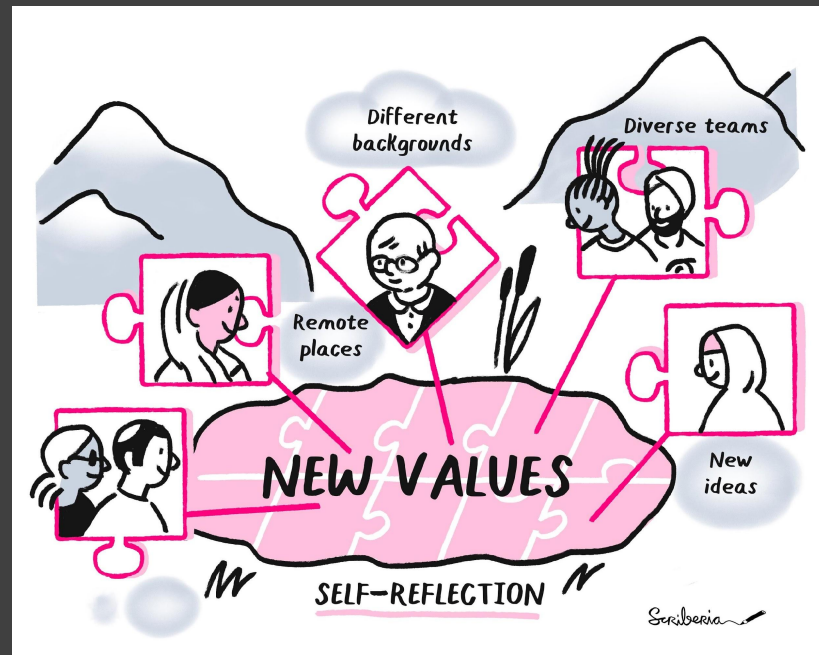
<https://the-turing-way.netlify.app/community-handbook/bookdash.html>

CC-BY image by The Turing Way & Scriberia, @turingway, @malvikasharan, CC-BY 4.0, DOI: 10.5281/zenodo.6475654

Join a Community Event

- *Collaboration Cafes*
 - 1st & 3rd Wednesdays (14:00 UTC)
- *Coworking Calls*
 - Mondays (10:00 UTC)
- *Onboarding Calls*
 - Fridays (17:00 UTC)
- *More ways to connect*

bit.ly/turingway



The Alan Turing Institute

Acknowledgements:

- Kirstie Whitaker, Whitaker Team Members
- *The Turing Way* community, friends & collaborators
- Book: the-turing-way.netlify.com
- Twitter: twitter.com/turingway
- Newsletter: tinyletter.com/TuringWay
- Chat: gitter.im/alan-turing-institute/the-turing-way
- GitHub: github.com/alan-turing-institute/the-turing-way
- Original artwork by Scriberia: <https://doi.org/10.5281/zenodo.3332807>

