The Alan Turing Institute

The Turing Way:
A collaborative guide to data science and research

March 10, 2023
Alden Conner
she/her

The Alan Turing Institute

The UK's national institute for data science and artificial intelligence
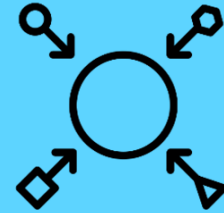
Tools, Practices and Systems

– Trustworthy systems

– Transparent reporting

– Inclusive interoperable design

– Ethical integrity

– Respectful co-creation
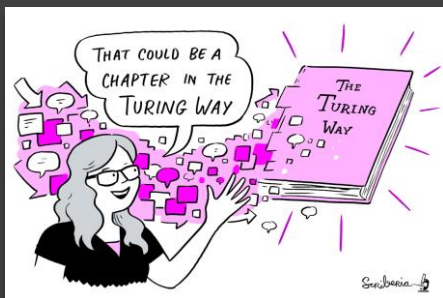
– Leadership in open research

The Turing Way

An Open Source guide on Data Science

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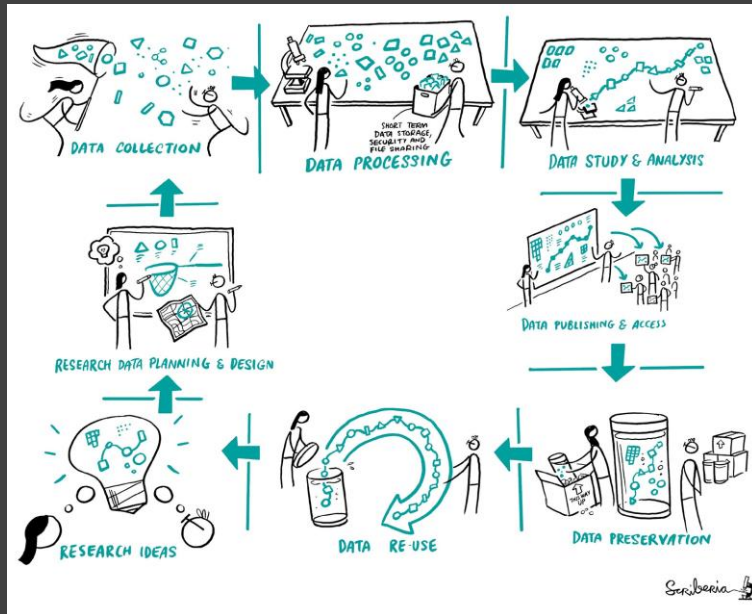

A book

A global community

An open-source project

A culture of collaboration

Reproducibility

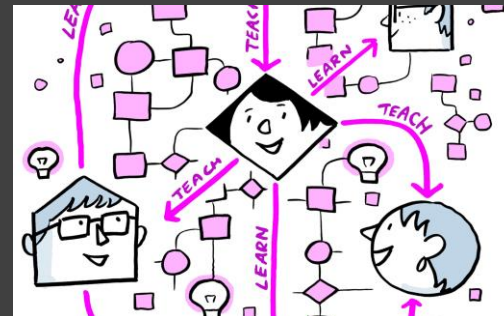# Guide for Reproducible Research

The Turing Way Guides

Reproducibility

Project design

Communication

Collaboration
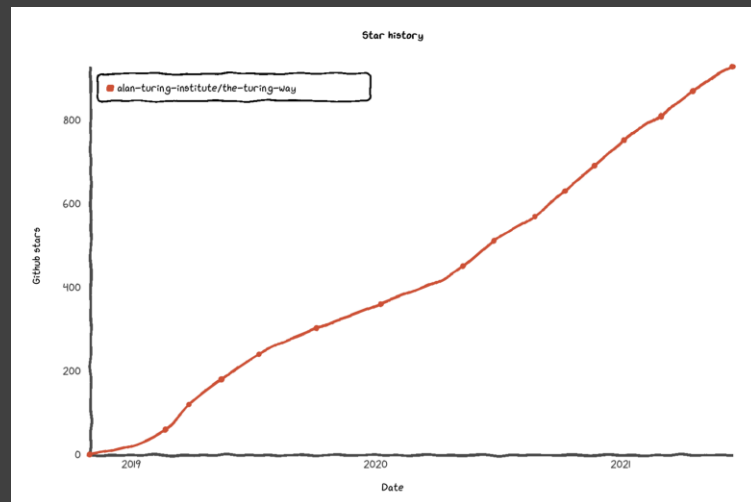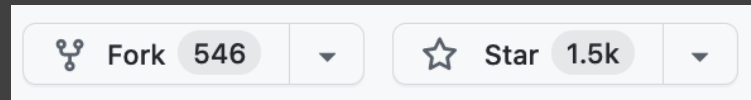

Ethical research

Community handbook

Project and Community Growth

- ~4 years, >250 pages

- Community resources, events, guidance, templates, training

- 420+ direct GitHub contributors and thousands of users

Fork 546 | Star 1.5k

Star history

alan-turing-institute/the-turing-way

GitHub stars

800

600

400

200

0

2019   2020   2021

Date

zenodo

20,046 views | 17,220 downloads
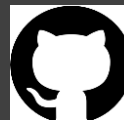
Pathways for Collaboration

Develop & share

Maintain & improve

Share resources

Review and update

Make it global

Share best practices

A community-oriented collaborative book

Batool Almarzouq

- Role: Book Dash November 2020 Attendee
- ORCID: 0000-0002-3905-2751
- Short bio:

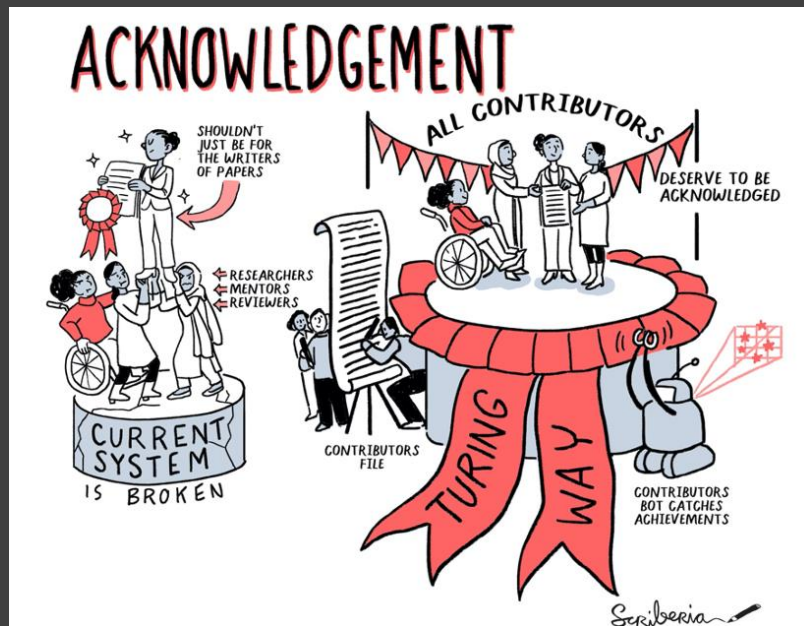 I'm the founder of R-Ladies in Saudi Arabia (Dammam). I initially majored in pharmacology but quickly developed an interest in biochemistry, structural biology, and bioinformatics. I enjoy applying deep learning to answer biological questions.

- Personal highlights:

  I am currently co-developing a chapter on "CI services". I have helped upgrade the Jupyter Book Infrastructure and add hypothes.is to enable collaborative annotation of *The Turing Way* chapters. I have also translated the README.me chapter in Arabic. Personal quote: "I find it hard to express my personal thoughts and feelings in words. This was such an amazing experience. It helped me to develop my technical skills. Thank you so much to everyone I met in this Book Dash event :heart:."

Acknowledging all contributions

The Turing Way

This README.md file in 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

Mentored Contribution

Collaboration Cafes and
weekly coworking

Book Dash Events
(in-person & virtual)
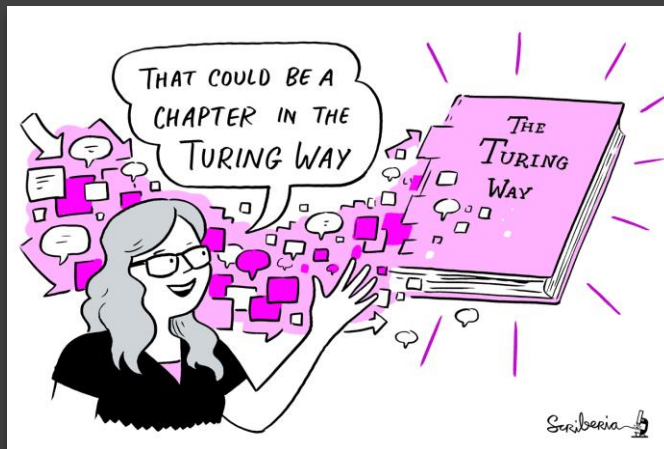
Book:
the- turing-way.netlify.app/

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

Slack:
theturingway.slack.com

Twitter:
twitter.com/turingway
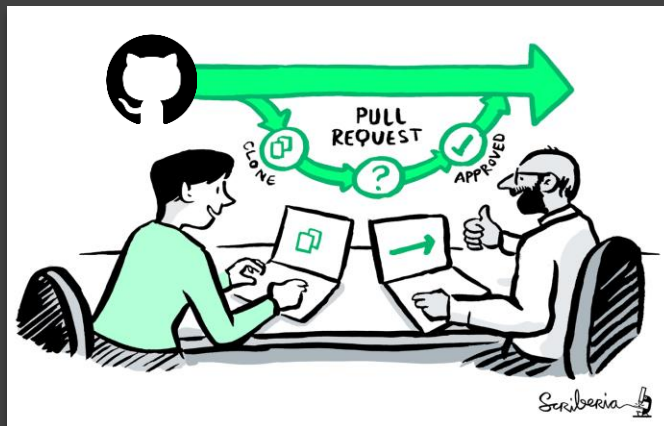
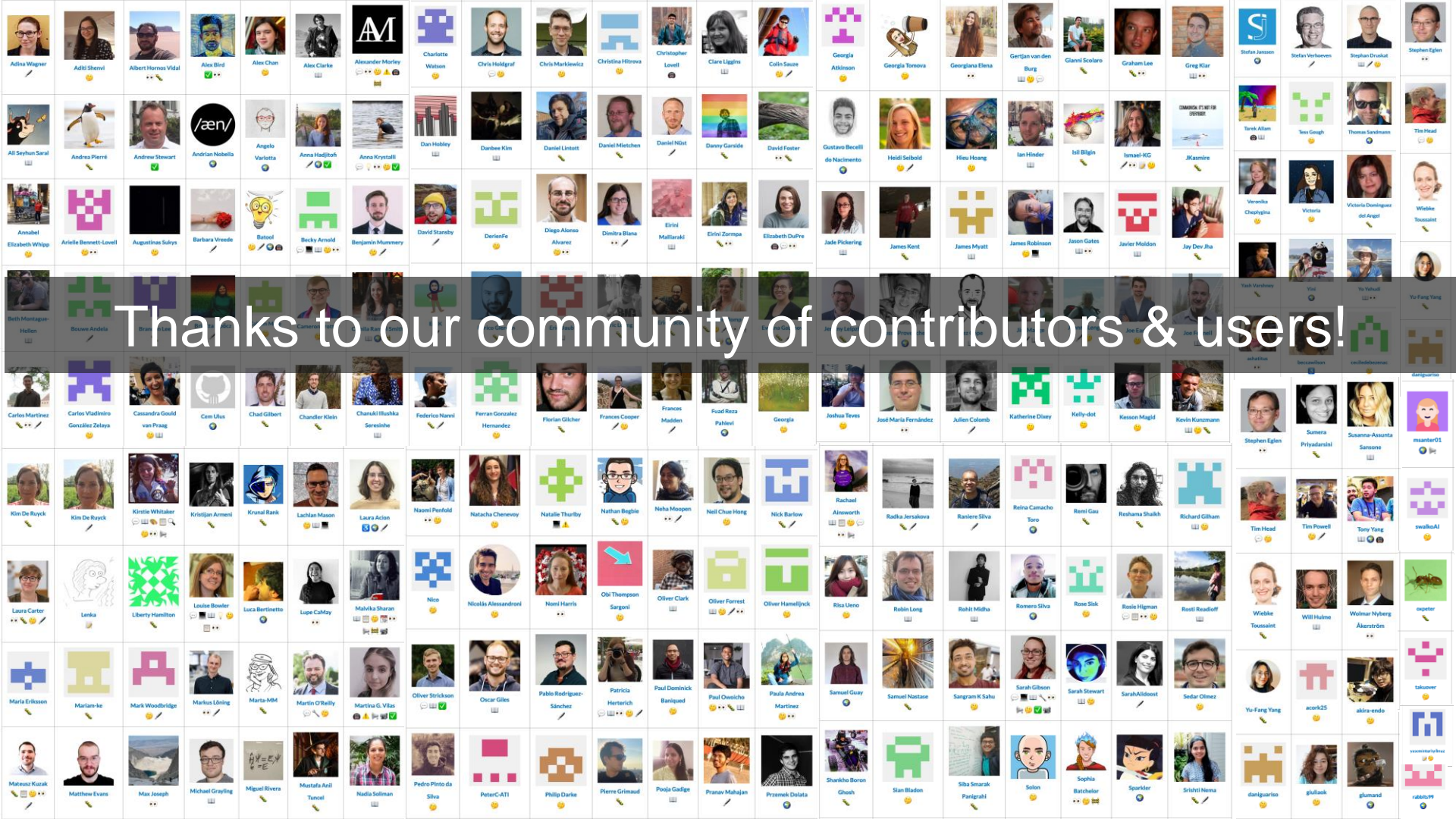**Email:**
theturingway@gmail.com

A book with five guides

A community

An open-source project

A culture of collaboration

Thanks to our community of contributors & users!

Notable impacts beyond the project

Resources are being used by learners, educators, community builders, policy makers and researchers globally

- Featured in Goldacre Review (2022)
- Highly commended project in The Hidden REF Competition (2022)
- An Emerging Technology Charter by Mayor of London (policy)
- Reproducibility of scientific results in the EU 2020 (report)
- Innovation Scholars: UKRI grant 2020 (funding)
- CodeRefinary and Library Carpentries (training materials)
- Projects by data scientists including at the Office for National Statistics
- Cited by 10+ peer-reviewed articles & 10+ open source projects

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

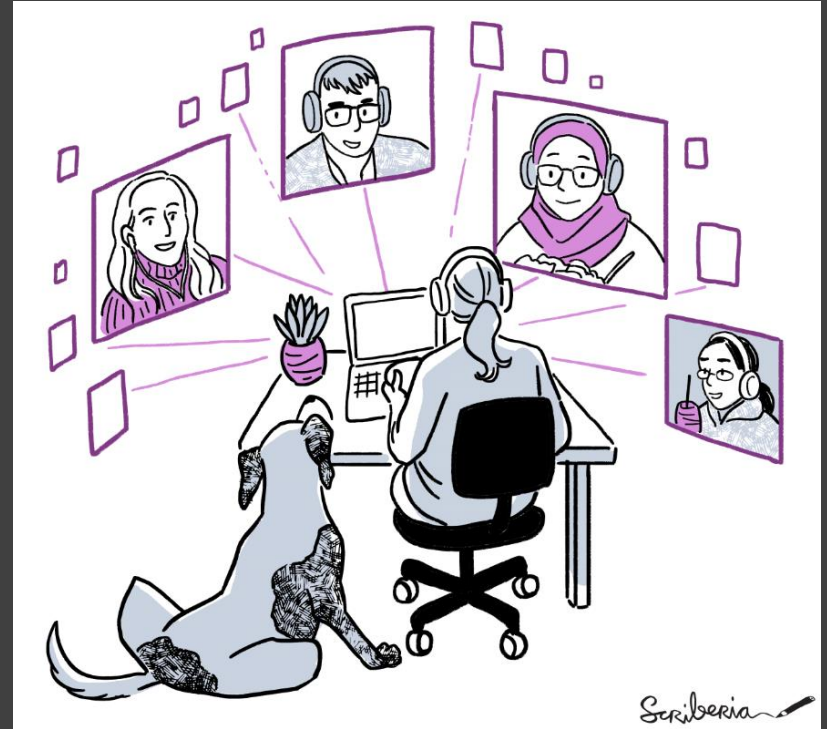*We value your participation!*
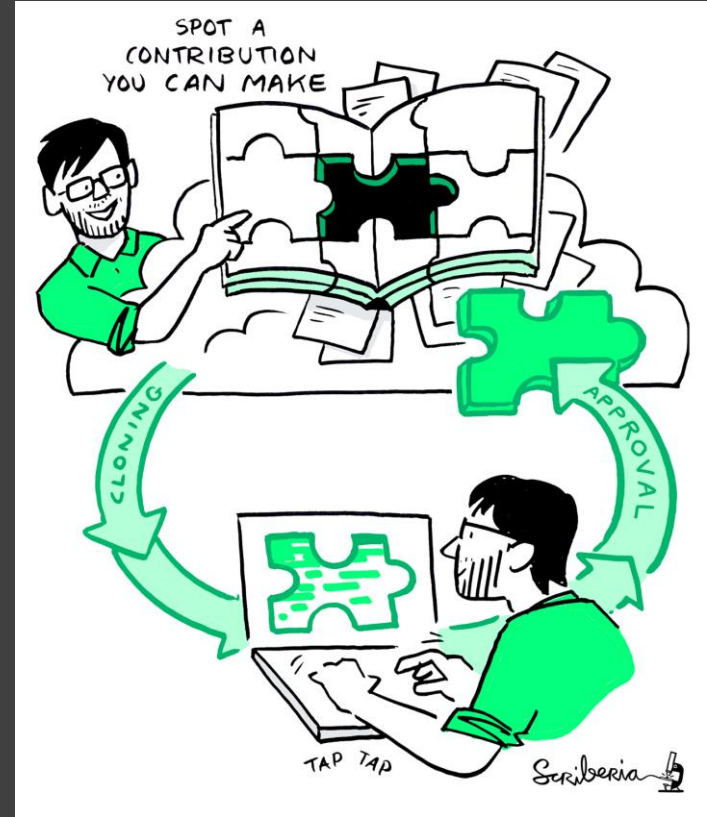
Join a community event

- *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

Acknowledgements:

– The Turing Way team, Kirstie Whitaker, Malvika Sharan, Anne Lee Steele

– *The Turing Way* community, contributors & collaborators

Keep in touch:

– 🐘 @alden@spore.social, @turingway@fosstodon.org

– 🦤 @alden_tweets, @turingway

– Book: the-turing-way.netlify.com

– Newsletter: tinyletter.com/TuringWay

– Slack: tinyurl.com/jointuringwayslack

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

– Original artwork by Scriberia: https://doi.org/10.5281/zenodo.3332807