The Alan Turing Institute

The Turing Way: Collaboratively Learning and Sharing Research Skills

Malvika Sharan

Pronouns: she/her

https://zenodo.org/record/3968440, @malvikasharan @turingway, #TuringWay

Shared Knowledge

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To make data-driven decisions with the help of research communities

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Data Science Community

Brings together all stakeholders
to practice **research skills**

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Brings together all stakeholders to practice **research skills** and foster a **culture of continuous learning**.

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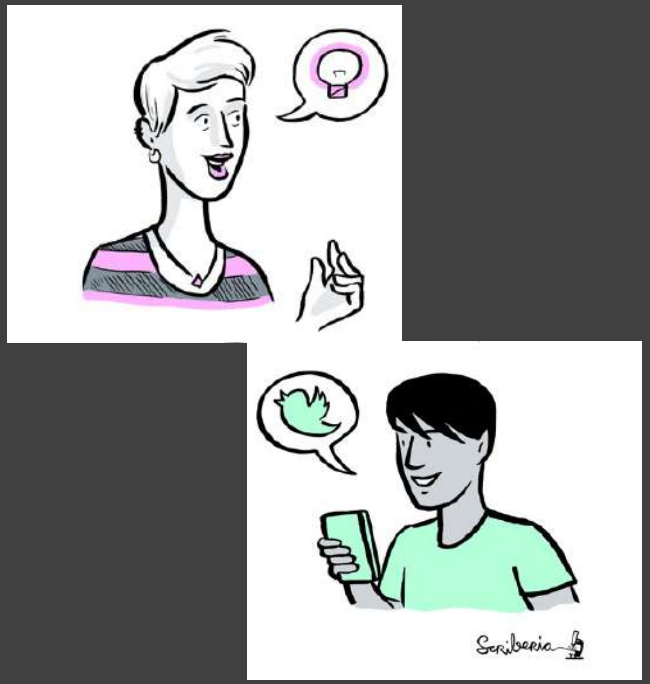
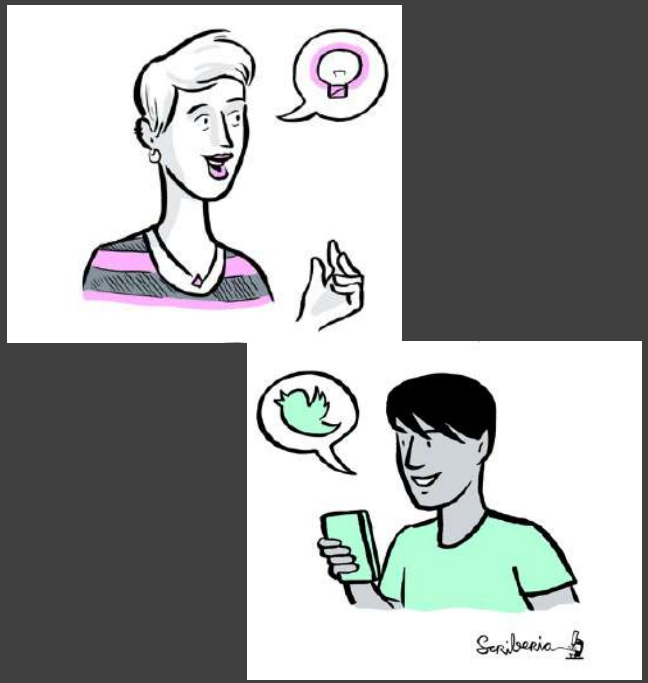
This talk is

– About open research & communities



Time for Open Communities

- About open research & communities
- Anyone can lead an ‘Open’ project

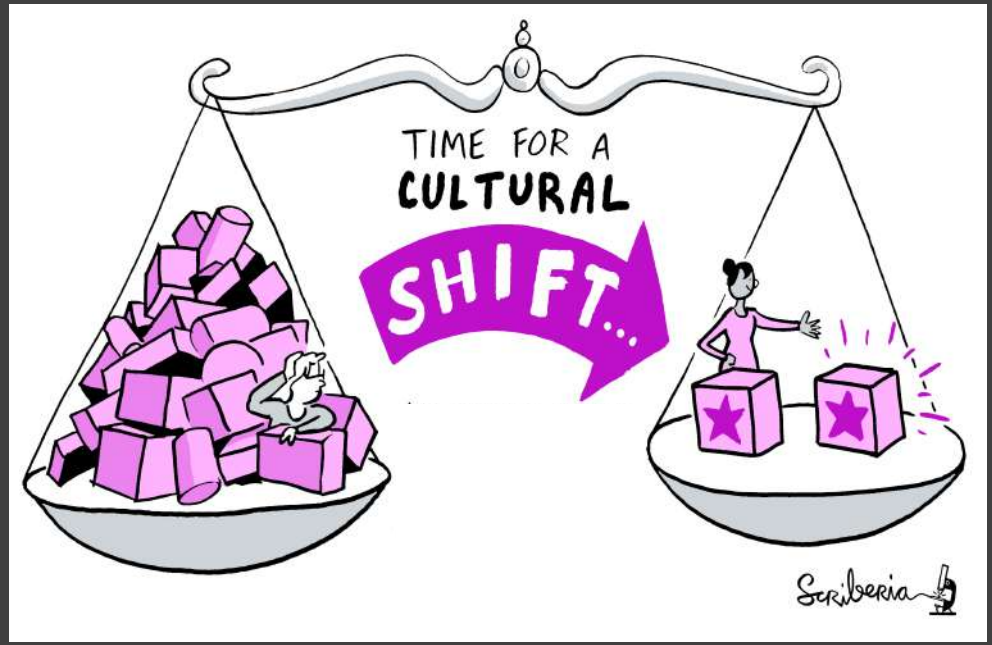


Time for Open Communities

- About open research & communities
- Anyone can lead an ‘Open’ project
- *Also more people may face barriers to open research, <u>if not done right.</u>*

Barriers to Open Research

- Reward system
- Novel findings
- Publication cost
- Training and skill transfer
- Leadership
- Institutions (often)
- Lack of trust



Open Research communities

Open community refers to collaborative efforts in Open Research

Barriers to Open Research communities

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The resulting work is made available under a free license.

Barriers to Open Research communities

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The biggest barrier is a lack of open & inclusive culture

Christie Bahlai, Assistant Professor, Kent University

Why invest in community culture?

- Common project goals
- Diverse backgrounds & expectations
- Together form a culture!

Why invest in community culture?

- Common project goals
- Diverse backgrounds & expectations
- Together form a culture!

“You, as a project leader, must take initiative with regards to what culture you want to foster. If not, a culture will develop without you.” - Karin Lagesen

Open Research Communities must be

inclusive by design.

Openness can not be an afterthought.

The Turing Way:

A community for collaboratively learning and sharing research skills

Community Manager – Research Associate

www.cambridge-news.co.uk/news/cambridge-news/gallery/pictures-tour-new-eddington-development-13563567 (Image: Warren Gunn)

The Turing Way

An **Open Source** project that involves and supports its **diverse members** of different skills and backgrounds to ensure that data science is **beneficial for everyone**.

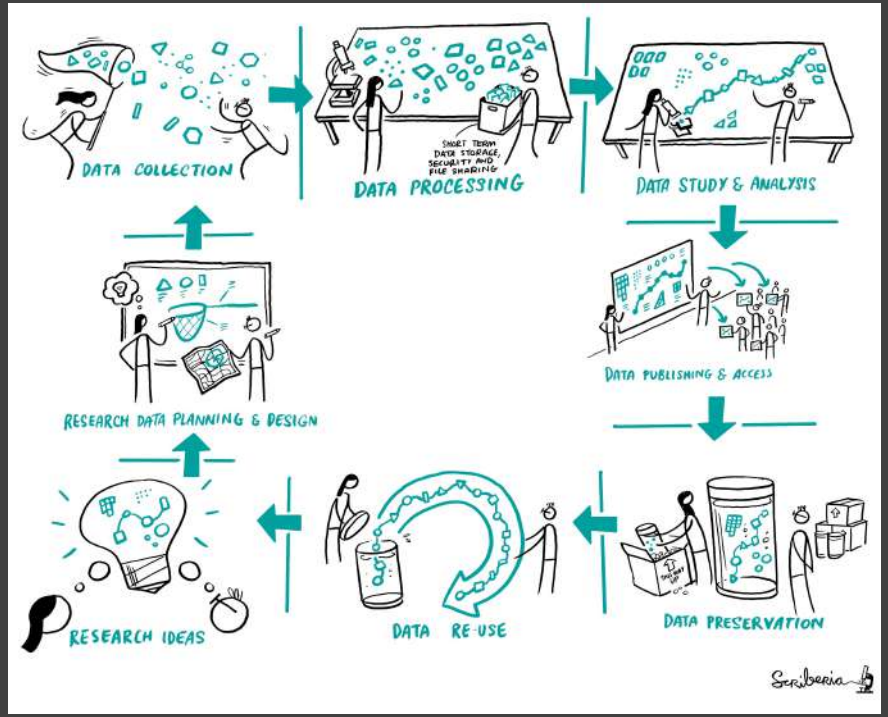
The Turing Way

Kirstie Whitaker
Program Lead for Tools, Practices and Systems

The moonshot goal of the project is to make reproducible research "too easy not to do"

A book on reproducibility

Same analysis steps on the same dataset produces same answer



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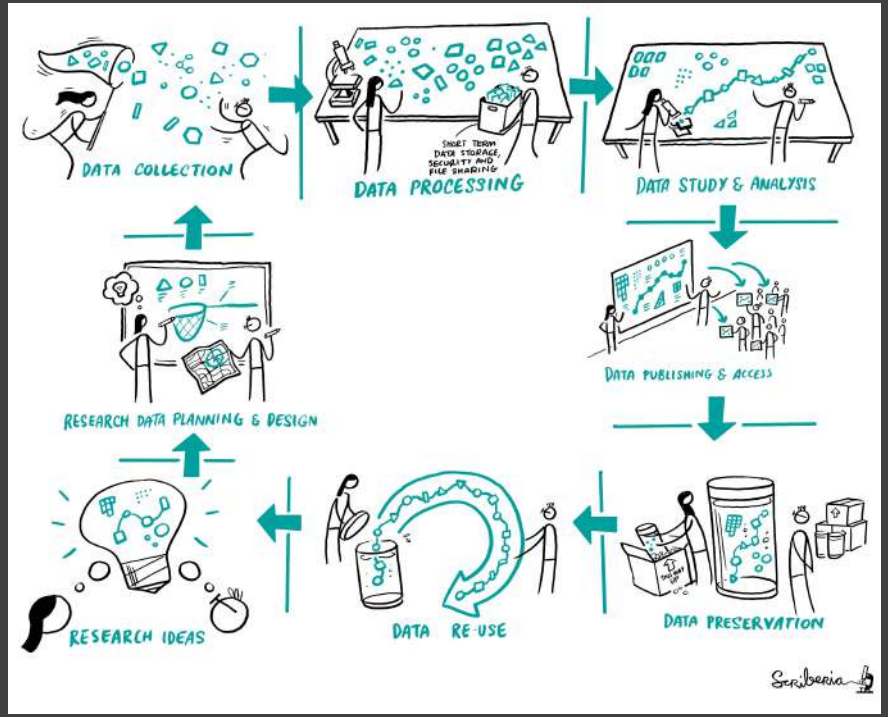
A book on reproducibility

Same analysis steps on the same dataset produces same answer

This process is overwhelming.



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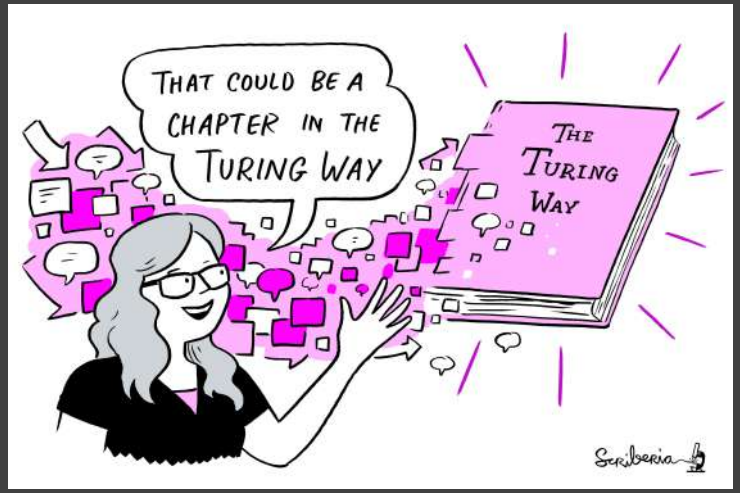
The Turing Way



“Literally anyone can contribute to The Turing Way. That’s the special sauce of the project.”

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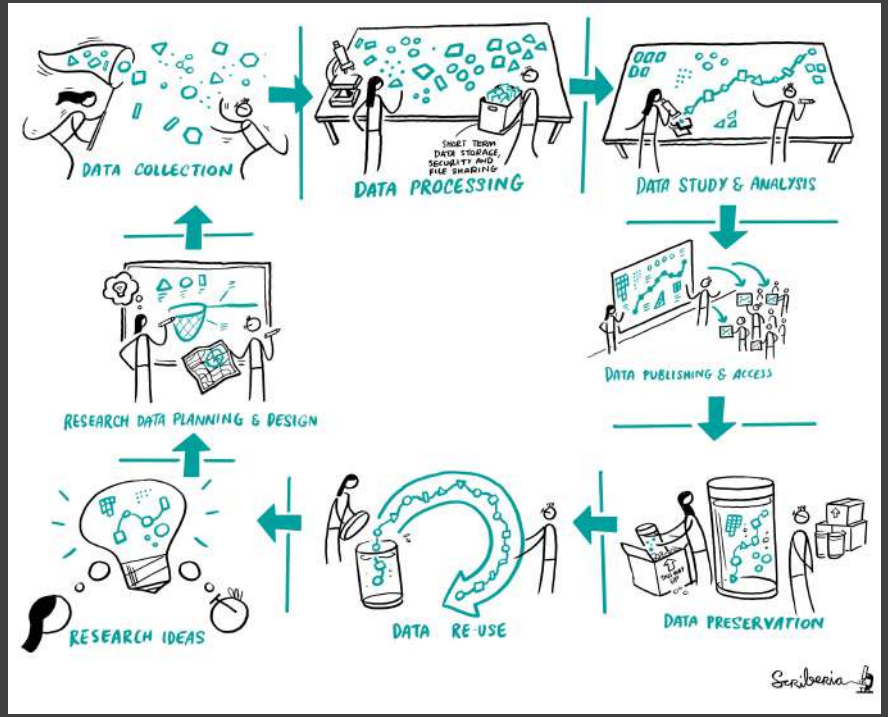
A book on reproducibility

Same analysis steps on the same dataset produces same answer

This process is overwhelming.

1 year, >20 chapters, a growing community of diverse stakeholders.



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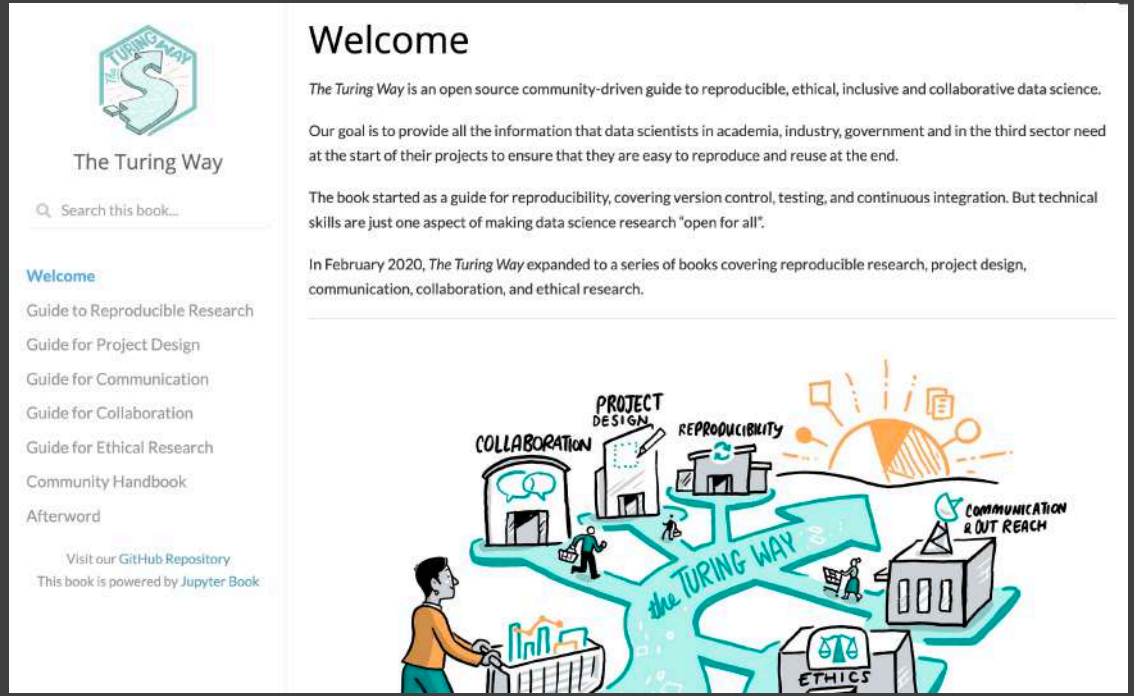
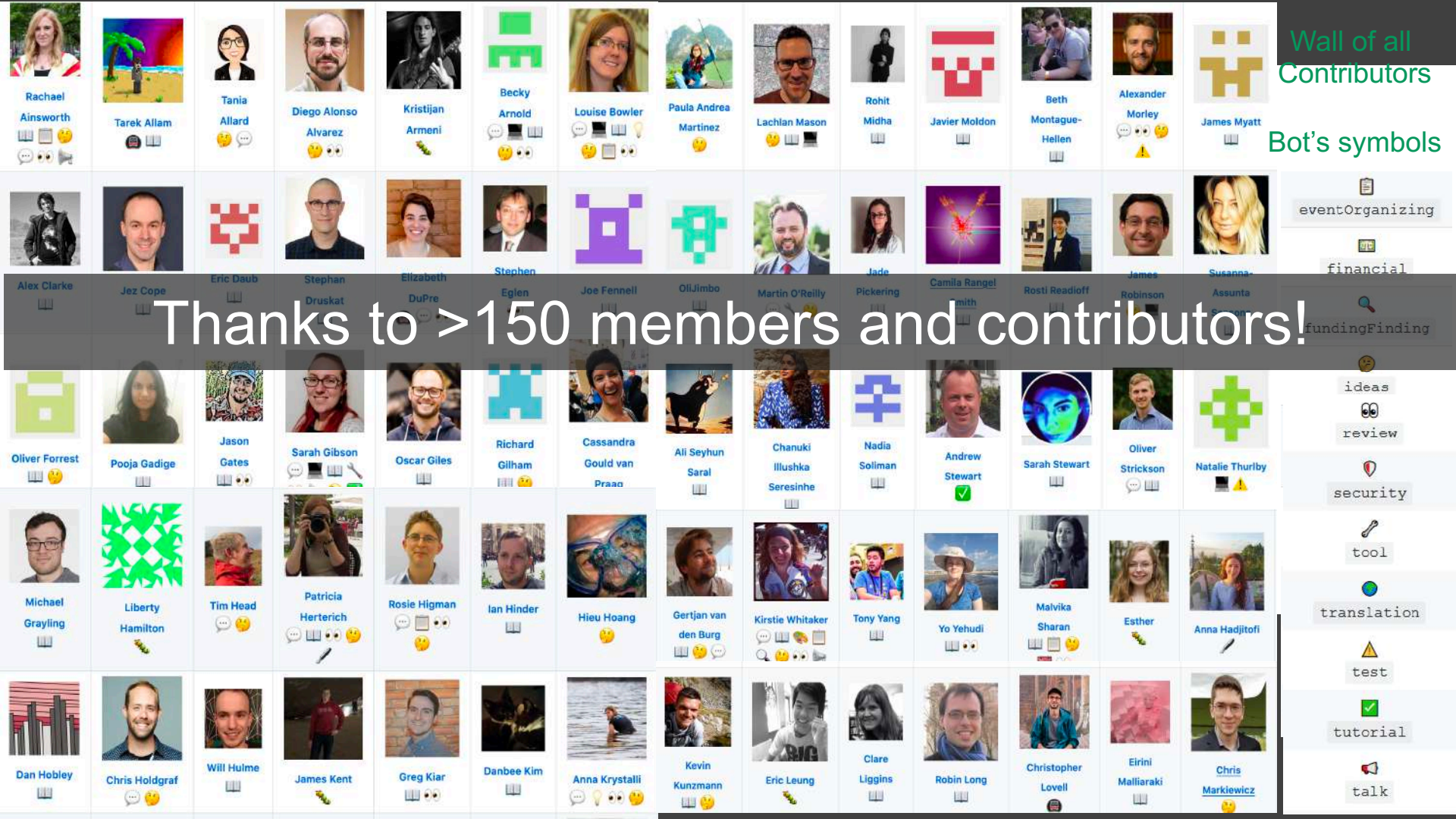
Expanding Scope

It's about the journey to reproducibility.



Book on: the-turing-way.netlify.app, https://zenodo.org/record/3968440, @malvikasharan @turingway, #TuringWay


Wall of all Contributors
Bot's symbols
Rachael Ainsworth
Tarek Allam
Tania Allard
Diego Alonso Alvarez
Kristijan Armeni
Becky Arnold
Louise Bowler
Paula Andrea Martinez
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Anna Krystalli
Kevin Kunzmann
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Clare Liggins
Robin Long
Christopher Lovell
Eirini Malliaraki
Chris Markiewicz
eventOrganizing
financial
fundingFinding
ideas
review
security
tool
translation
test
tutorial
talk
Thanks to >150 members and contributors!

Building a community culture

Image on Unsplash by @adolfofelix, https://zenodo.org/record/3968440, @malvikasharan @turingway, #TuringWay

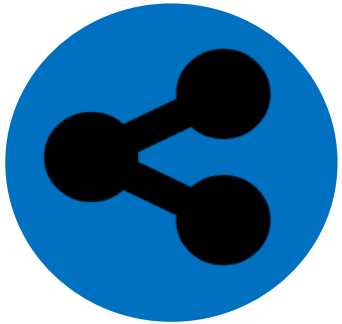
Open Leadership

Understanding

Your work is clear, authentic and widely accessible

Open Leadership

Understanding

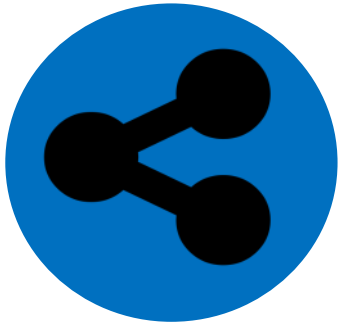


Sharing

Your work can be adapted, reproduced, and built upon

Open Leadership

Understanding



Sharing

Participation & Inclusion

Creates a shared ownership that inspires contributions

The Turing Way Promotes

a culture of collaboration

Every little bit helps.

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.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

Mentored Contributions

Collaboration Cafés & Co-working Calls

Book Dash Events

Pathways of Engagement

Martina Vilas

Maintain resources

Sarah Gibson

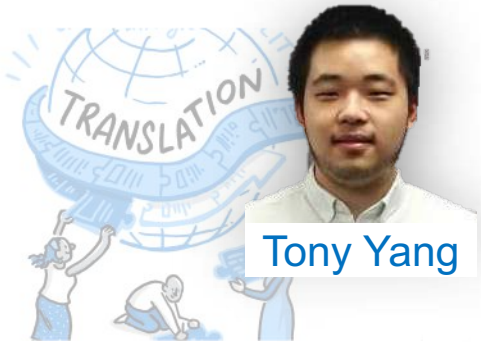
Discuss ideas

Fix bugs

netherlands eScience center

Mateusz K., Carlos M.

Support contributors



Tony Yang

Help translate

Improve our culture

Meeting where you are!

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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.3332808