

**The  
Alan Turing  
Institute**

---

**Safe, ethical, and  
open research in  
the age of AI**

**Kirstie Whitaker**  
Pronouns: she/her

@TuringWay @kirstie\_j  
<https://doi.org/10.5281/zenodo.10080932>



**Research  
Programme  
Director for  
Tools,  
Practices &  
Systems  
The Alan  
Turing Institute**



@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

**Research  
Programme  
Director for  
Tools,  
Practices &  
Systems  
The Alan  
Turing Institute**



@TuringWay @kirstie\_j  
<https://doi.org/10.5281/zenodo.10080932>

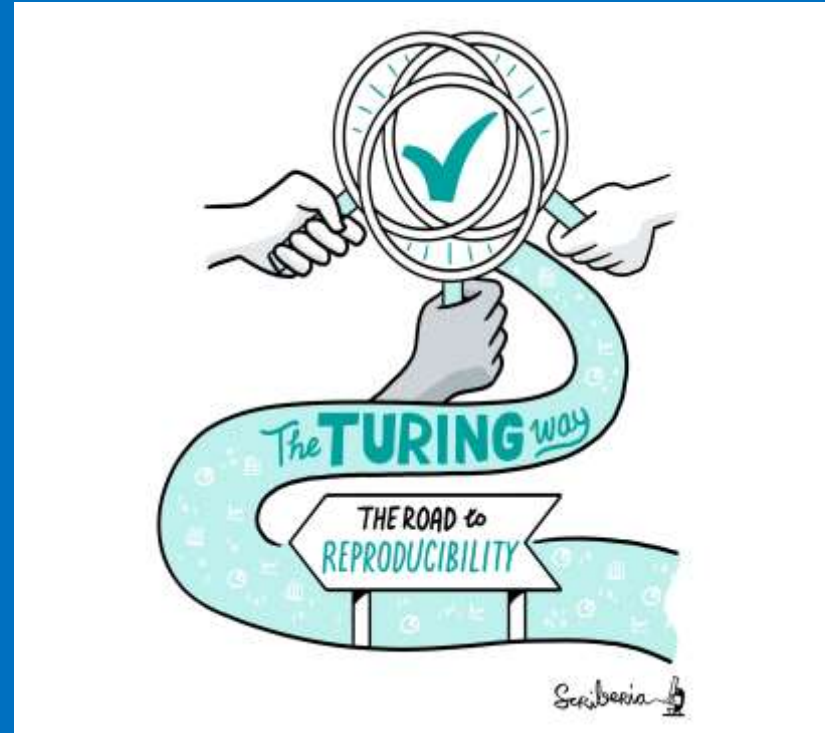
“

*The Turing Way* is an **open source book project** that involves and supports a **diverse research community** in ensuring that reproducible and ethical **data science** is accessible and comprehensible **for everyone**.

”

The Turing Way is:

- a book
- a community
- a global collaboration
- a whole tonne of work

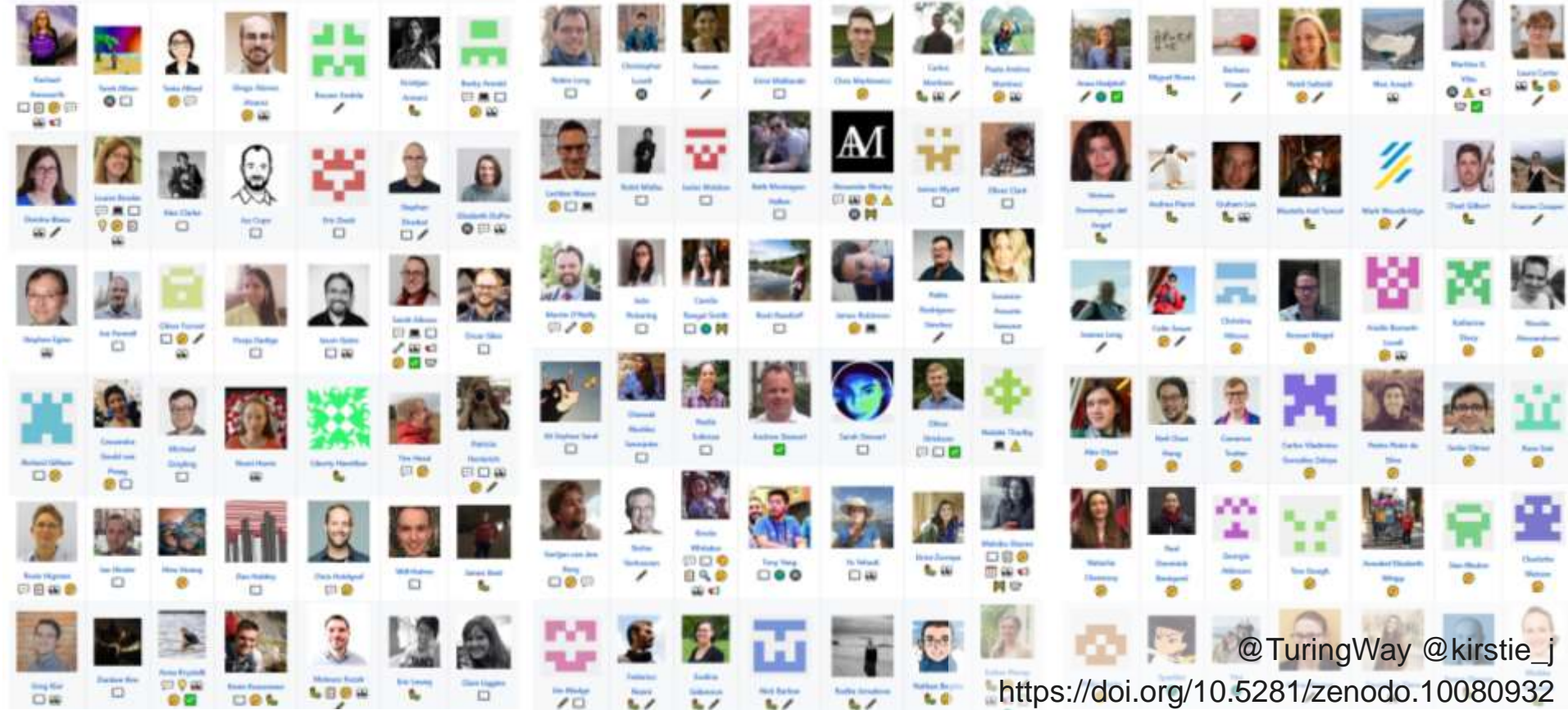


@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>



# Thank you to our 400+ contributors



@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

---

# Malvika Sharan

“No one can change research culture on their own. Scaling our community by empowering YOU to participate is how we will change the world.”









Personal experience of:

- File drawer effect
- Lack of reproducibility
- Imposter syndrome around coding
- Lonely
- Wasted time
- Hypocrisy of academia

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

<https://www.turing.ac.uk/about-us/impact/asg>

# VERSION CONTROL



Personal experience of:

- File drawer effect
- Lack of reproducibility
- Imposter syndrome around coding
- Lonely
- Wasted time
- Hypocrisy of academia

---

# #bropenscience is broken science

All elements of open scholarship should be in service of equity, diversity and inclusion.

Faster, more accessible  
→ Better quality insights  
→ A more just world



Whitaker & Guest, 2020.

<https://www.bps.org.uk/psychologist/bropenscience-broken-science>

<https://hdl.handle.net/2066/226397>

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

---

# Newspeak

“propagandistic language marked by euphemism, circumlocution, and the inversion of customary meanings”

**Free software:** “users have the freedom to run, copy, distribute, study, change and improve the software”

<https://www.merriam-webster.com/dictionary/newspeak>

<https://www.gnu.org/philosophy/free-sw.en.html>

<https://opensource.org/osd>



@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>



---

# Newspeak

“propagandistic language marked by euphemism, circumlocution, and the inversion of customary meanings”

**Open source:** “Open source doesn’t just mean access to the source code”



**open source  
initiative<sup>®</sup>**

<https://www.merriam-webster.com/dictionary/newspeak>  
<https://www.gnu.org/philosophy/free-sw.en.html>  
<https://opensource.org/osd>

@TuringWay @kirstie\_j  
<https://doi.org/10.5281/zenodo.10080932>

---

# LLaMA2 is not open

“Meta using the term ‘open source’ for this is positively misleading: There is no source to be seen, the training data is entirely undocumented, and beyond the glossy charts the technical documentation is really rather poor.” – Mark Dingemans



<https://spectrum.ieee.org/open-source-llm-not-open>  
Liesenfeld, Lopez & Dingemans, 2023;  
<https://doi.org/10.1145/3571884.3604316>

@TuringWay @kirstie\_j  
<https://doi.org/10.5281/zenodo.10080932>

There is a growing amount of instruction-tuned text generators billing themselves as 'open source'. How open are they really? [ACM paper](#) [PDF](#) [repo](#)

Project (maker, bases, URL)	Availability						Documentation				Access			
	Open code	LLM data	LLM weights	RL data	RL weights	License	Code	Architecture	Preprint	Paper	Modelcard	Datasheet	Package	API
<b>BLOOMZ</b> <small>bigscience-workshop</small>	✓	✓	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✗	✓
<small>LLM base: BLOOMZ, mt9      RL base: xP3</small>														
<b>Open Assistant</b> <small>LAION-AI</small>	✓	✓	✓	✓	✗	✓	✓	✓	-	✗	✗	✗	✓	✓
<small>LLM base: Pythia 12B      RL base: OpenAssistant Conversations</small>														
<b>Pythia-Chat-Base-7...</b> <small>lloydthompson</small>	✓	✓	✓	✓	✗	✓	✓	✓	-	✗	-	-	✓	✗
<small>LLM base: EleutherAI pythia      RL base: DPO</small>														
<b>RedPajama-INCITE...</b> <small>TogetherComputer</small>	-	✓	✓	✓	✓	-	-	-	✗	✗	✓	✓	✗	-
<small>LLM base: RedPajama-INCITE-7B-Base RL base: various (GPT-JT recipe)</small>														

<b>LLaMA2 Chat</b> <small>Facebook Research</small>	✗	✗	-	✗	-	✗	✗	-	-	✗	-	✗	✗	-
<small>LLM base: LLaMA2      RL base: Meta, StackExchange, Anthro...</small>														
<b>Solar 70B</b> <small>Upstage AI</small>	✗	✗	-	✗	-	✗	✗	✗	✗	✗	-	✗	✗	-
<small>LLM base: LLaMA2      RL base: Orca-style, Alpaca-style</small>														
<b>ChatGPT</b> <small>OpenAI</small>	✗	✗	✗	✗	✗	✗	✗	✗	-	✗	-	✗	✗	✗
<small>LLM base: GPT 3.5      RL base: Instruct-GPT</small>														
<b>Xwin-LM</b> <small>Xwin-LM</small>	✗	✗	-	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	-
<small>LLM base: LLaMA2      RL base: unknown</small>														

How to use this table. Every cell records a three-level openness judgement (✓ open, - partial, or ✗ closed) with a direct link to the available evidence; on hover, the cell will display the notes we have on file for that judgement. At the end of a row, the [§](#) is a direct link to source data. The table is sorted by cumulative openness, where ✓ is 1, - is 0.5 and ✗ is 0 points. Note that RL may refer to RLHF or other forms of fine-tuning aimed at fostering instruction-following behaviour.

<https://huggingface.co/papers/2306.02707>

<https://opening-up-chatgpt.github.io>  
Liesenfeld, Lopez & Dingemane, 2023

@TuringWay @kirstie\_  
<https://doi.org/10.5281/zenodo.10080932>

---

# “Publicly” available data is not open

Creators are being harmed through this technology:

- Authors Guild are suing OpenAI.
- Double strike over fair compensation: SAG-AFTRA and Writers Guild of America.



<https://authorsguild.org/news/ag-and-authors-file-class-action-suit-against-openai>

<https://www.vox.com/culture/2023/7/13/23793828/sag-aftra-strike-wga-hollywood>

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

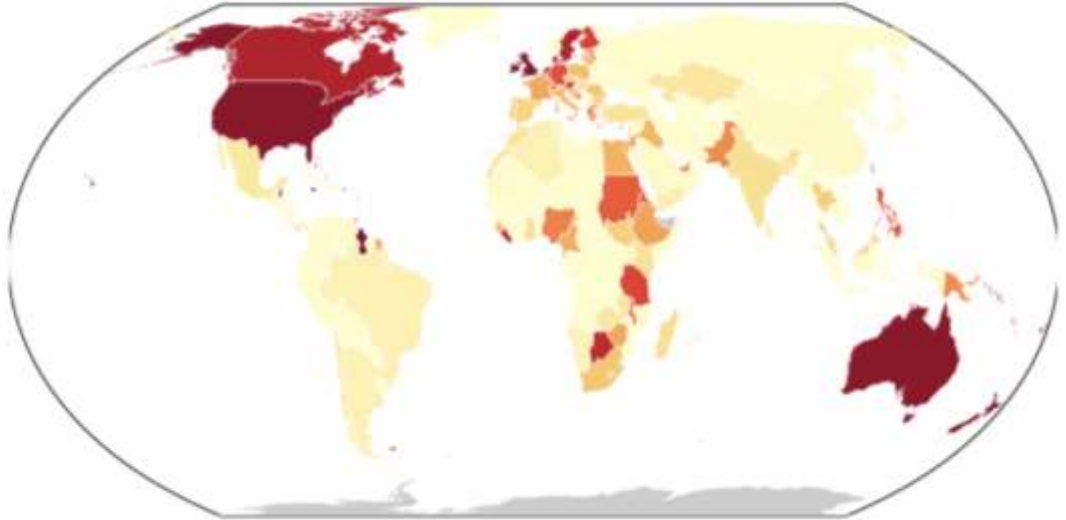



## Data Provenance for AI

A massive audit of 1800+ AI text datasets, tracing their provenance and composition from origin to creation.

The race to train language models on vast, diverse, and inconsistently documented datasets has raised pressing concerns about the legal and ethical risks for practitioners, and the models they train. To remedy these dubious practices in data transparency and understanding, we convene a multi-disciplinary effort between legal and machine learning experts to systematically audit and trace

Language Distribution



“Frequent miscategorization of licenses on widely used dataset hosting sites, with license omission of 68%+ and error rates of 50%+.”

@TuringWay @kirstie\_j

A large group of diverse African people, including men and women of various ages, are shown in a celebratory mood. Many have their arms raised in the air, and they are smiling and looking towards the camera. The background is slightly blurred, suggesting an indoor setting like a conference or a community gathering. The overall atmosphere is one of joy and collective achievement.

# OPENAI'S CONTENT MODERATORS JUST UNIONIZED IN AFRICA

"FOR TOO LONG WE, THE WORKERS  
POWERING THE AI REVOLUTION, WERE  
TREATED AS DIFFERENT AND LESS THAN  
MODERATORS."

@TuringWay @kirstie\_j

<https://futurism.com/the-byte/ai-content-moderators-unionized-africa>

<https://doi.org/10.5281/zenodo.10080932>

# Who is building open source AI?

21 September, 14:00 - 15:30 UTC+1

*Register on Eventbrite*

Defining



**Arielle Bennett**

Programme Manager  
The Alan Turing Institute



**Mophat Okinyi**

Union Representative  
African Content Moderators Union



**Marzieh Fadaee**

Senior Research Scientist  
Cohere for AI



**Abinaya Mahendiran**

CTO  
Nunnari Labs



**David Gray Widder**

Postdoctoral Fellow  
Cornell Tech



**Jennifer Ding**

Senior Researcher  
The Alan Turing Institute



Hosted  
by:



open source  
initiative\*

# Open Source Initiative Deep Dive: Defining Open Source AI



Prof David Leslie  
Director of Ethics and  
Responsible Research  
and Innovation



Victoria Kwan  
Corporate Governance  
Research Ethics  
Manager



Dr Kirstie Whitaker  
Director of Tools,  
Practices and Systems  
Research Programme

**Operationalising the SAFE-D principles for Open Source AI**

<https://opensource.org/deepdive/webinars/operationalising-the-safe-d-principles-for-open-source-ai>



- Open Science and society
- Research integrity and publishing ethics
- AI and scholarly communication
- Open repositories
- New horizons in metrics and research assessment

**The good news: we're already thinking about these topics!**

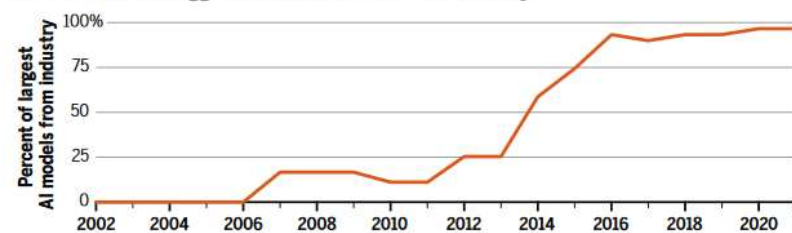
- Open Science and society
- Research integrity and publishing ethics
- AI and scholarly communication
- Open repositories
- New horizons in metrics and research assessment

**But: are we  
connecting  
with the  
right  
people?**

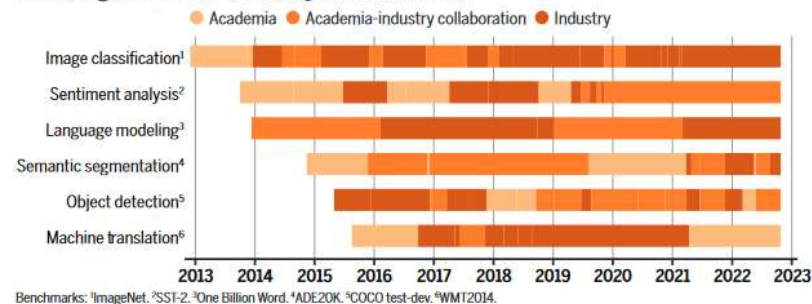
# Industry is dominating the AI conversation

- 70% of people with a PhD in AI are employed in industry
- Costs prohibitively high for academic researchers
- Very little incentive to work on safe & equitable AI for the public good

Percent of the 10 biggest AI models that are from industry



Increasing domination of industry in AI benchmarks







@TuringWay @kirstie\_j  
<https://doi.org/10.5281/zenodo.10080932>



Bank of England

AA44 699671

Financial Services Operations in credit

	Q1	Q2	Q3	Q4	Final
PS, L	9.5	9.5	9.5	9.5	(A)
PS, R	9.5	9.5	9.5	9.5	(A)
PS	9.5	9.5	9.5	9.5	(A)

© 1999 Bank of England. All rights reserved.



Fifty Pounds

This is only a forecast of what is to come and only the shadow of what is going to be

© 1999 Bank of England. All rights reserved.

Alan Turing 1912-1954



£50



AA44 699671

@TuringWay @kirstie\_j

<https://news.sky.com/story/new-alan-turing-50-note-revealed-12255979> <https://doi.org/10.5281/zenodo.10080932>



<https://bletchleypark.org.uk>

@TuringWay @kirstie\_j  
<https://doi.org/10.5281/zenodo.10080932>



# Our UK university network

Aston University  
Birkbeck University of London  
Cardiff University  
City, University of London  
Coventry University  
Durham University  
Edinburgh Napier University  
Goldsmiths, University of London  
Heriot-Watt University  
Imperial College London  
Keele University  
King's College London  
Lancaster University  
London Business School  
London School of Hygiene  
and Tropical Medicine  
Loughborough University  
Manchester Metropolitan University  
Newcastle University  
Northumbria University  
Nottingham Trent University  
Oxford Brookes University  
Queen Mary University of London  
Queen's University Belfast  
Royal Holloway University of London  
Royal Veterinary College  
Sheffield Hallam University  
Swansea University  
Teesside University  
The London School of Economics  
and Political Science  
The Open University  
The University of Leicester  
The University of St Andrews



University College London  
University of Aberdeen  
University of Bath  
University of Birmingham  
University of Bradford  
University of Bristol  
University of Cambridge  
University of Dundee  
University of East Anglia  
University of Edinburgh  
University of Essex  
University of Exeter  
University of Glasgow  
University of Greenwich  
University of Hull  
University of Leeds  
University of Lincoln  
University of Liverpool  
University of Manchester  
University of Nottingham  
University of Oxford  
University of Plymouth  
University of Portsmouth  
University of Reading  
University of Salford  
University of Sheffield  
University of Southampton  
University of Strathclyde  
University of Surrey  
University of Sussex  
University of Warwick  
University of Westminster  
University of York

@TuringWay @kirstie\_j

# Our international network





# Our partners and collaborators



<https://www.turing.ac.uk/partnering-turing/current-partnerships-and-collaborations>

@TuringWay @kirstie\_  
<https://doi.org/10.5281/zenodo.10080932>

A large red and white icebreaker ship is shown sailing through a field of sea ice. The ship has a prominent red hull and a white superstructure with a red roof. It is equipped with various antennas and radar equipment on its mast. The ship is moving through a dense field of white sea ice under a clear blue sky. The text is overlaid on a semi-transparent white box on the left side of the image.

**Changing the world for the better  
using data science and AI,  
providing an end-to-end,  
interdisciplinary pathway,  
enabling impact at scale and major  
progress against societal challenges.**

[Home](#) > [Business and industry](#) > [Science and innovation](#) > [Artificial intelligence](#) > [AI Safety Summit 2023: The Bletchley Declaration](#)



[Department for  
Science, Innovation  
& Technology](#)



[Foreign, Commonwealth  
& Development Office](#)



[Prime Minister's Office, 10  
Downing Street](#)

Policy paper

# The Bletchley Declaration by Countries Attending the AI Safety Summit, 1-2 November 2023

Published 1 November 2023

[https://www.gov.uk/government/publications/  
ai-safety-summit-2023-the-bletchley-declaration](https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration)

[@TuringWay @kirstie\\_j  
https://doi.org/10.5281/zenodo.10080932](https://doi.org/10.5281/zenodo.10080932)

[Home](#) > [Business and industry](#) > [Science and innovation](#) > [Artificial intelligence](#) > [AI Safety Summit 2023: The Bletchley Declaration](#)



Depart  
Science  
& Tech

**Artificial Intelligence (AI) presents enormous global opportunities: it has the potential to transform and enhance human wellbeing, peace and prosperity.** To realise this, we affirm that, for the good of all, AI should be designed, developed, deployed, and used, in a manner that is **safe**, in such a way as to be **human-centric, trustworthy and responsible**. We welcome the international community's efforts so far to cooperate on AI to promote inclusive economic growth, sustainable development and innovation, to **protect human rights and fundamental freedoms**, and to **foster public trust and confidence** in AI systems to fully realise their potential.





Department for  
Science, Innovation  
& Technology



Foreign, Commonwealth  
& Development Office



Prime Minister's Office, 10  
Downing Street

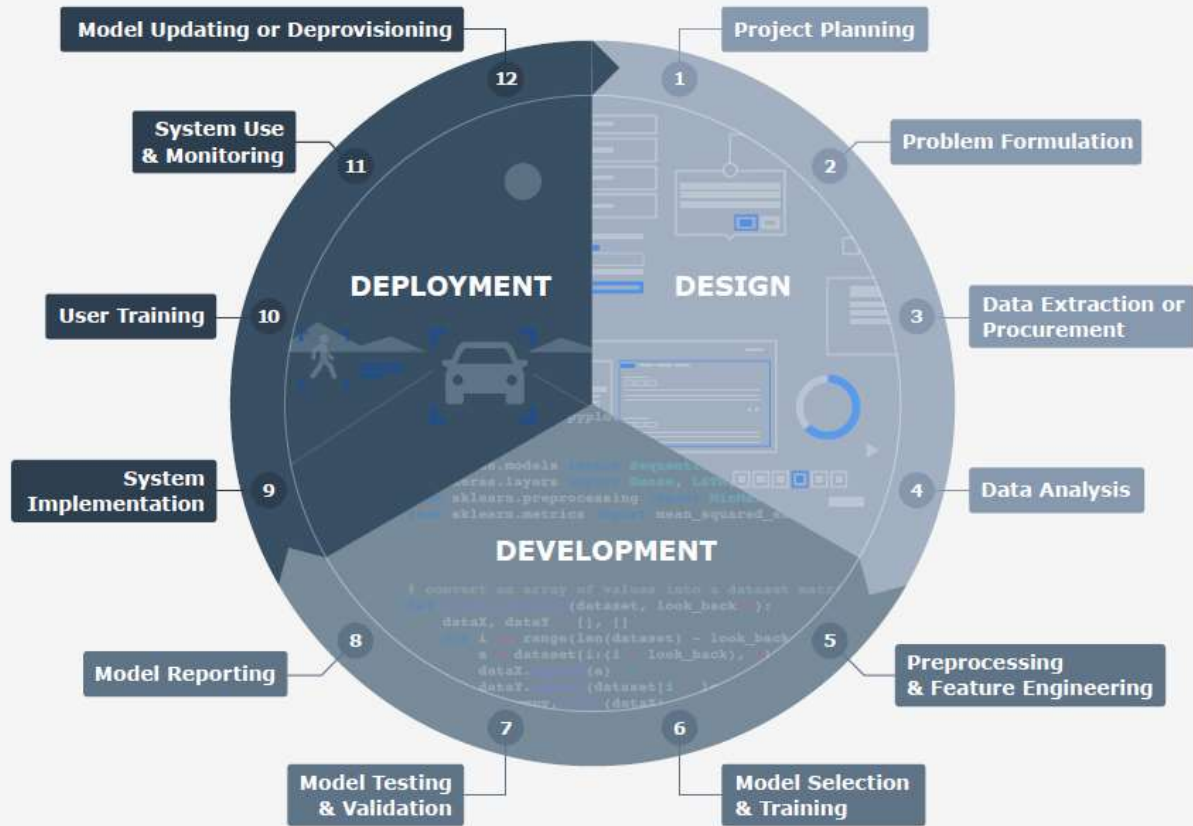
**In the context of our cooperation, and to inform action at the national and international levels, our agenda for addressing frontier AI risk will focus on:**

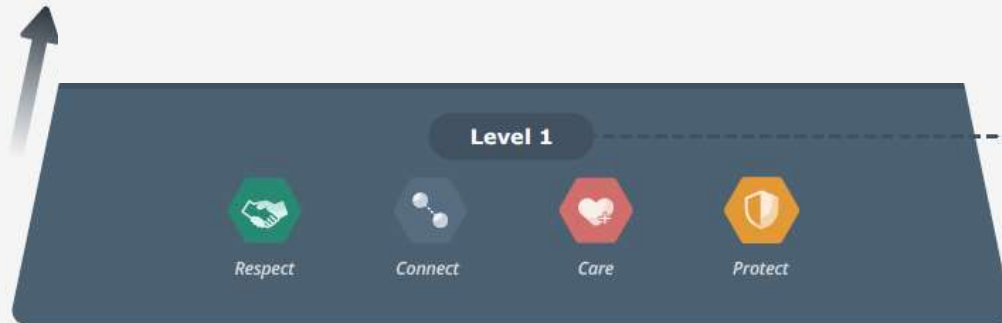
- **identifying AI safety risks of shared concern, building a shared scientific and evidence-based understanding of these risks, and sustaining that understanding as capabilities continue to increase, in the context of a wider global approach to understanding the impact of AI in our societies.**

Published November 2023

“AI system” means any computational system (or a combination of such systems) that uses methods derived from statistics or other mathematical techniques to carry out tasks that are commonly associated with, or would otherwise require, human intelligence and that either assists or replaces the judgment of human decision-makers in carrying out those tasks.







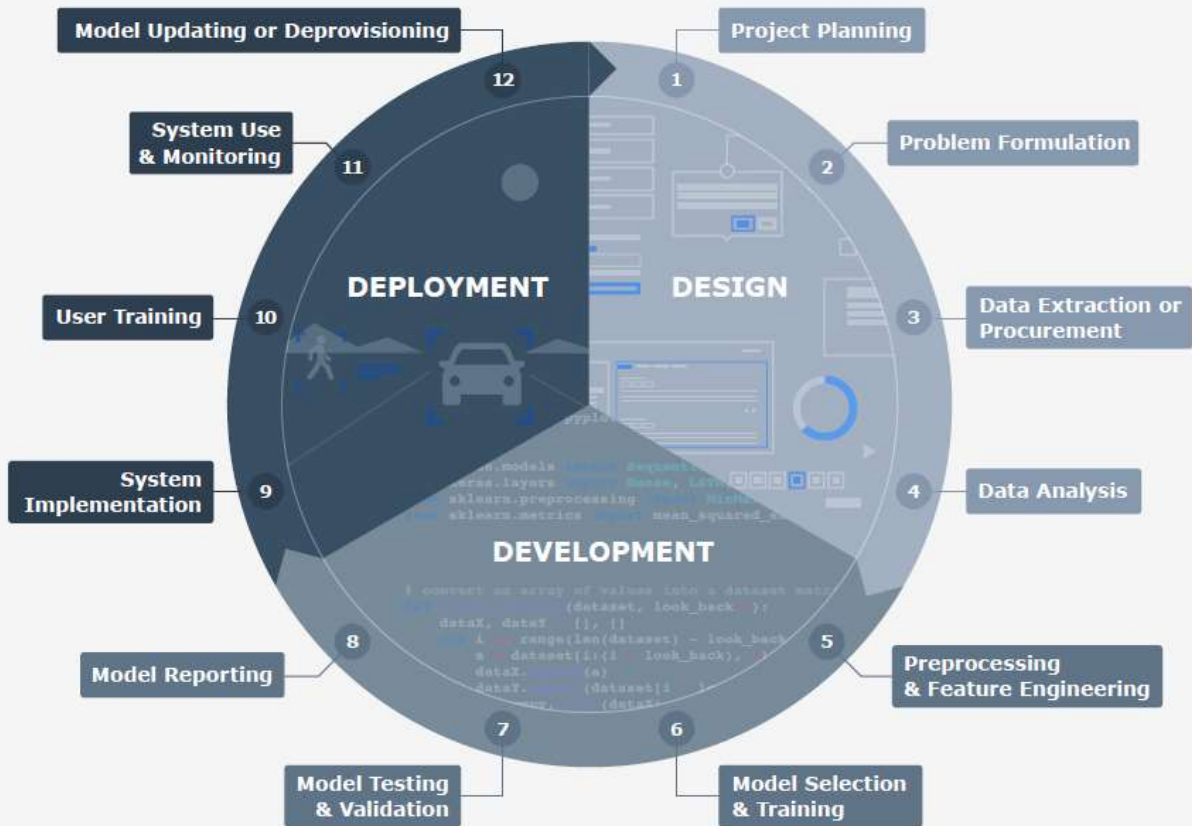
• **The Sum Values**

These values support, underwrite, and motivate responsible AI projects and provide criteria for assessing their potential social and ethical impacts.









- Open Science and society
- Research integrity and publishing ethics
- AI and scholarly communication
- Open repositories
- New horizons in metrics and research assessment



A photograph of a forest path with sunlight streaming through the trees, creating a warm and bright atmosphere. The sun is visible in the upper right corner, casting rays of light across the scene. The trees are lush green, and the path is covered in fallen leaves and grass.

**“Sunlight is the  
best disinfectant”**

Louis Brandeis

[https://en.wiktionary.org/wiki/sunlight\\_is\\_the\\_best\\_disinfectant](https://en.wiktionary.org/wiki/sunlight_is_the_best_disinfectant)

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>



---

# Open scholarship practices are ready to deliver safe and ethical AI

- Safety and sustainability
- Accountability
- Fairness
- Explainability
- Data stewardship

---

# Open scholarship practices are ready to deliver safe and ethical AI\*

(\*We just have a little more work to do to promote and normalise them!)

- Safety and sustainability
- Accountability
- Fairness
- Explainability
- Data stewardship

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

---

# Open scholarship practices are ready to deliver safe and ethical AI

- Safety and sustainability
- Accountability
- Fairness
- Explainability
- Data stewardship

A large field of glowing jack-o'-lanterns at night, with a semi-transparent text box in the center. The pumpkins are carved with various faces and are illuminated from within, creating a warm orange glow. Some pumpkins have blue or purple lights around them. The background is dark with some trees and foliage.

“Given enough eyeballs, all bugs are shallow”

Eric Steven Raymond, The Cathedral and the Bazaar  
Linus' Law: [https://en.wikipedia.org/wiki/Linus%27s\\_law](https://en.wikipedia.org/wiki/Linus%27s_law)

@TuringWay @kirstie\_  
<https://doi.org/10.5281/zenodo.10080932>



---

# Open scholarship practices are ready to deliver safe and ethical AI

- **Safety and sustainability** Having a broad and engaged community involved throughout an AI development workflow keeps infrastructure more secure and keeps the purpose of the work aligned with the needs of the impacted stakeholders.
- Accountability
- Fairness
- Explainability
- Data stewardship

# Our 'North Star'

To remove barriers to working **safely** and **effectively** with sensitive data,

by promoting and demonstrating a **culture of open, community-led development**

of interoperable foundational **infrastructure** and **governance**.



---

# Project pillars

## Infrastructure as code

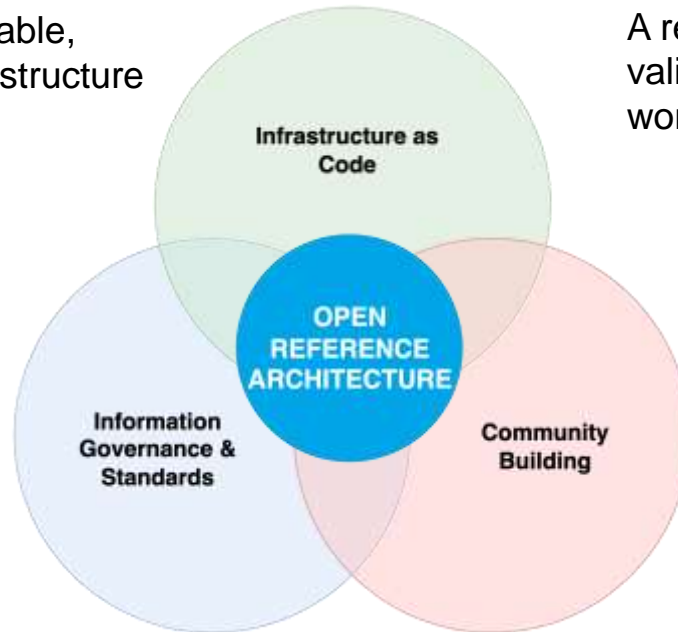
Building a deployable, reproducible infrastructure

## Information governance & standards

An accompanying IG framework that is standardised, auditable, accessible and practical

## A Turing production deployment

A real-world application and validation of the research workstreams



## Community building

An open-first community that empowers contributions from all stakeholders

<https://github.com/alan-turing-institute/data-safe-haven>

<https://data-safe-haven.readthedocs.io/en/latest>

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

---

# Open scholarship practices are ready to deliver safe and ethical AI

- Safety and sustainability
- **Accountability**
- Fairness
- Explainability
- Data stewardship



**“Anyone could say anything...nothing was official. And to emphasize the point, I labelled the notes ‘Request for Comments.’”**

---

# Open scholarship practices are ready to deliver safe and ethical AI

- Safety and sustainability
  - **Accountability**
  - Fairness
  - Explainability
  - Data stewardship
- Providing documentation covering how decisions are made, how changes can be suggested through requests for comment, and how concerns can be raised – for example through codes of conduct – facilitates accountability through the AI development workflow.

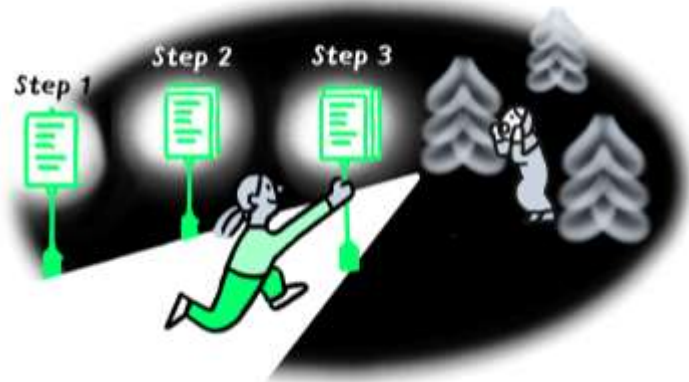
@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

# TRACK PROJECT HISTORY



## DOCUMENTATION



<https://the-turing-way.netlify.app/project-design/data-governance/data-gov-ml>

<https://the-turing-way.netlify.app/reproducible-research/vcs>

<https://the-turing-way.netlify.app/project-design/project-design>

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

---

# Open scholarship practices are ready to deliver safe and ethical AI

- Safety and sustainability
- Accountability
- **Fairness**
- Explainability
- Data stewardship





**“You don’t need a diversity committee if you have a diverse committee”**

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

Teon Brooks, <https://teonbrooks.com>

# About AutSPACES

A **research collaboration** between  
The Turing, Autistica, & Open Humans

A **community** of autistic people, their  
supporters, researchers and open  
source developers

A **citizen science** platform where  
people can share their experiences of  
sensory processing.

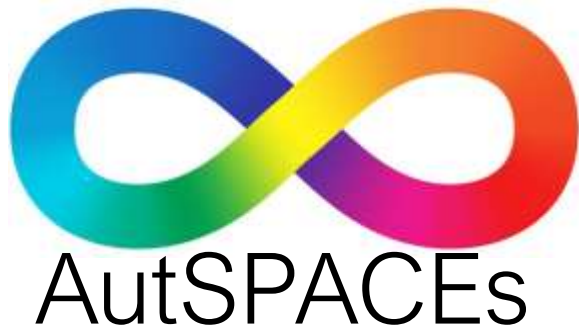
The  
Alan Turing  
Institute



@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

<https://doi.org/10.5281/zenodo.8164375>



**Collect** qualitative data to improve our understanding of sensory processing in people's daily lives

Share people's stories and adaptive techniques with others who have similar experiences

Educate neurotypical people to better support their friends, family and colleagues

Advise organisations on how they can design and adapt spaces to improve people's lives

@TuringWay @kirstie\_j

# Moderation Goals

---



James Scott



Susanna  
Fantoni

A welcoming,  
inclusive, and  
safe online  
space for  
autistic people

A space where  
autistic people  
can share  
challenging  
experiences

Decisions  
which balance  
the complex  
needs of the  
community



---

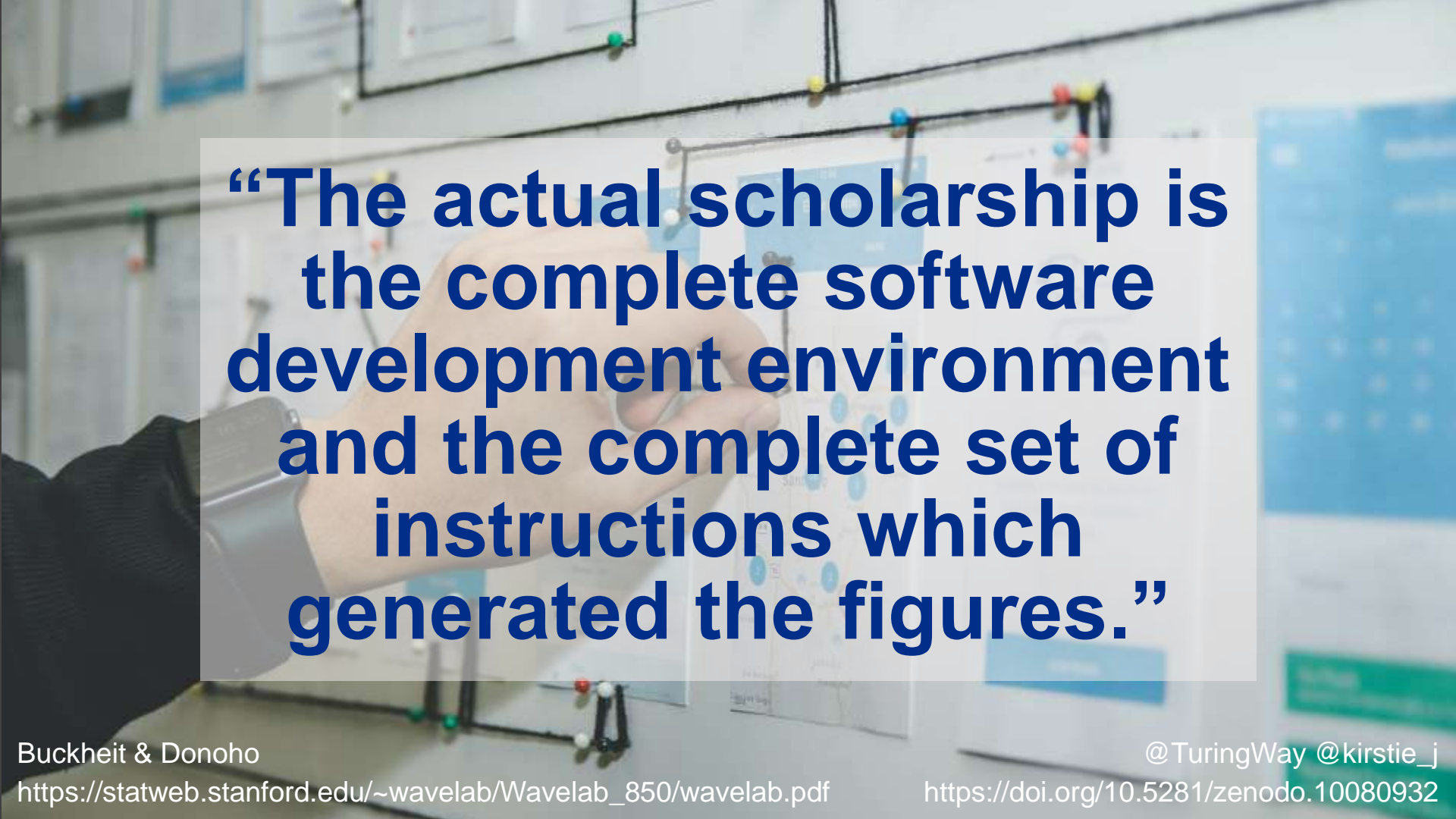
# Open scholarship practices are ready to deliver safe and ethical AI

- Safety and sustainability
  - Accountability
  - **Fairness**
  - Explainability
  - Data stewardship
- Open source AI should clearly communicate how the AI model and workflow are considering equity and justice. Scholarly communications experts can connect existing tools for bias reporting into an interoperable open source AI ecosystem.

---

# Open scholarship practices are ready to deliver safe and ethical AI

- Safety and sustainability
- Accountability
- Fairness
- Explainability
- Data stewardship

A hand in a dark sleeve points towards a whiteboard. The whiteboard is covered with various diagrams, charts, and papers, some of which are pinned with colorful pushpins. The background is slightly blurred, showing more of the whiteboard and the hand's movement.

**“The actual scholarship is the complete software development environment and the complete set of instructions which generated the figures.”**

---

# Open scholarship practices are ready to deliver safe and ethical AI

- Safety and sustainability
  - Accountability
  - Fairness
  - Explainability
  - Data stewardship
- The ability to interrogate all aspects of a workflow is the foundation of the definition of open source: access to the source code, data, and documentation. Current open scholarship ways of working will enhance transparency and explainability across the AI ecosystem.

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>





27 Universities

12 NHS Trusts

& charities, city councils, and public involvement organisations.

This chapter is separated into different subsections:

- **Chapter Landing page:** has been reviewed and merged into the chapter's WIP branch.
  - Next review will be when the full chapter PR is made.
- **The core chapter content:** currently WIP is separated into different subsections
  - Planning and Logistics: 🐞 [Added Inclusive Planning and Logistics subsection](#) #3315
  - Location: 🐞 [Added Inclusive Events Location subsection](#) #3318
  - Communication: 🐞 [Added Inclusive Events Communications Subsection](#) #3327
  - Schedule and Agenda Planning: 🐞 [Added Inclusive Events Schedule and Agenda Subsection](#) #3337
  - Networking and Social Events
  - Technology and Hybrid Considerations
  - Content Accessibility Guidance
  - Facilitation and Moderation
- **A checklist summarizing the content:**
  - link to [branch](#), link to [file](#)
- **A page of resources:**
  - link to [branch](#), link to [file](#)

---

# Open scholarship practices are ready to deliver safe and ethical AI

- Safety and sustainability
- Accountability
- Fairness
- Explainability
- **Data stewardship**



**“Digital assets should  
be findable, accessible,  
interoperable, and  
reusable”**



---

# Open scholarship practices are ready to deliver safe and ethical AI

- Safety and sustainability
  - Accountability
  - Fairness
  - Explainability
  - **Data stewardship**
- Metadata standards allow for interoperability even where data can not be made openly available. Documentation, accountability, and transparency around how data is gathered and used are the building blocks of open source AI.



**Stop**  
**Start**  
**Continue**

# Stop

---

- Focussing too narrowly on research outputs.
- Reinventing the wheel for each individual institution or domain.
- Avoiding the wicked problem of deployment challenges.

# Start

---

- Promoting our solutions for accountability in an AI development workflow.
- Explicitly connecting data processing responsibilities with bias mitigation reporting frameworks in a socio-technical framework.

# Continue

---

- Working transparently.
- Acknowledging diverse communities.
- Documenting data governance decisions.
- Supporting maintenance and infrastructure work.
- Scaling access to knowledge worldwide.

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

“Opening science involves opening up the processes of creating, evaluating, sharing, exploring and storing scientific knowledge, practices and perspectives.”

“All scientific disciplines and aspects of scholarly practices, including basic and applied sciences, natural and social sciences and the humanities, are included.”





---

# Thank you

- **TPS Senior Researchers:**

Malvika Sharan, Aida Mehonic,  
Alden Conner, Jennifer Ding,  
Bastian Greshake Tzovaras &  
Christopher Burr

- **Research Community**

**Managers:** Emma Karoune,  
Vicky Hellon, Anne Lee Steele,  
Sophia Batchelor, Eirini Zormpa,  
Gabin Kayumbi, Cassandra  
Gould Van Praag

- **GC Research Ethics Manager:**

Victoria Kwan

- **Research Application**

**Managers:** Hari Sood, Shakir  
Laher, Kalle Westerling, Sophie  
Arana & Francisco Gomez  
Medina

- **Programme management:**

Arielle Bennett, Dave Chapman,  
Davide Sarmiento Perez, Batool  
Almarzouq, Alexandra Araujo  
Alvarez, Sydney Ambrose

- **Research associates and**

**fellows:** Georgia Aitkenhead,  
Giulia Tomba, Priscilla Canizares

@TuringWay @kirstie\_j

<https://doi.org/10.5281/zenodo.10080932>

---

# Please join us in The Turing Way!

- Book: <https://the-turing-way.netlify.com>
  - Newsletter: <https://tinyletter.com/TuringWay>
  - GitHub: <https://github.com/alan-turing-institute/the-turing-way>
  - Slack: <https://tinyurl.com/jointuringwayslack>
  - Book dash community share outs on Friday 17 November  
<https://www.eventbrite.co.uk/e/the-turing-way-book-dash-community-share-outs-and-celebrations-nov-2023-tickets-735393400457>
  - Original artwork by Scriberia: <https://doi.org/10.5281/zenodo.3332807>
  - This work was supported by The UKRI Strategic Priorities Fund under the EPSRC Grant EP/T001569/1, particularly the "Tools, Practices and Systems" theme within that grant, and by The Alan Turing Institute under the EPSRC grant EP/N510129/1.  
@TuringWay @kirstie\_j
- <https://doi.org/10.5281/zenodo.10080932>



Scriberia 

@TuringWay @kirstie\_j

<https://the-turing-way.netlify.com>

<https://doi.org/10.5281/zenodo.10080932>