

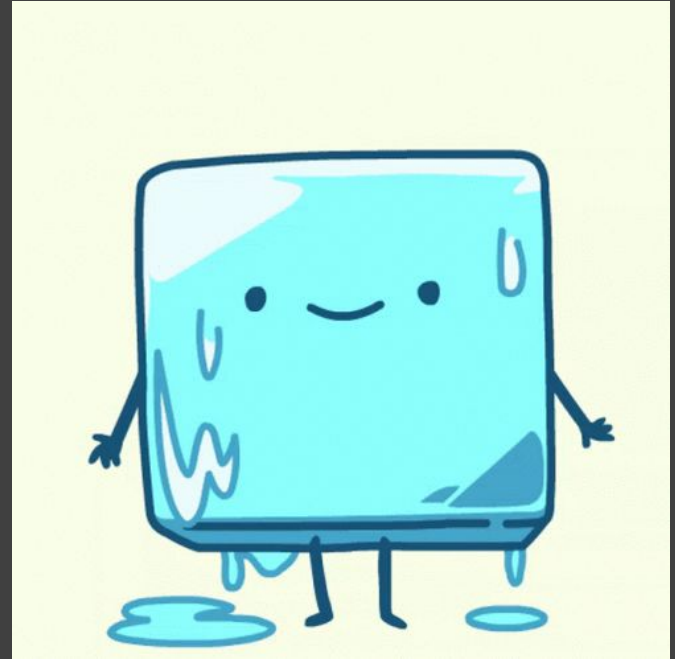
Icebreaker

If you could pick a title for your role - what would you be called?

Be as creative as you'd like.

Sign-in here:

<https://tinyurl.com/ymma95wn>



The Alan Turing Institute

Research infrastructure roles: perspectives, paths and lived experiences

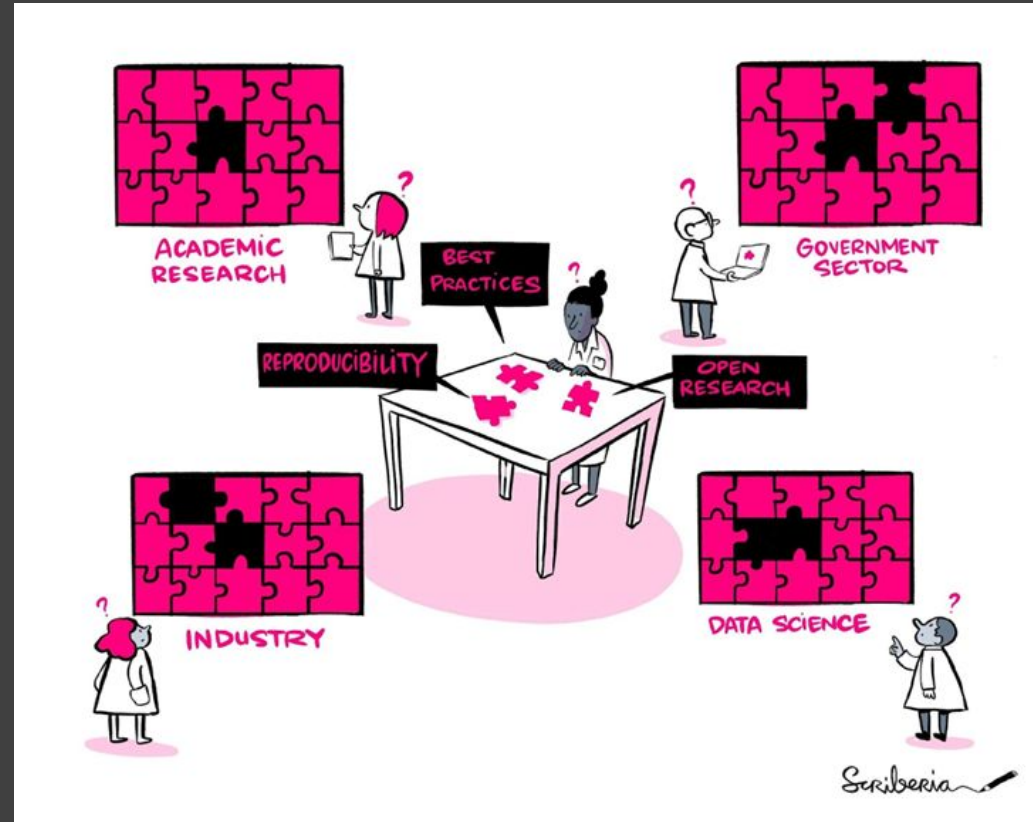
CW23: 3 May 2023

Alexandra Araujo Alvarez, Anne Lee Steele, Camila Rangel
Smith, Emma Karoune, Hari Sood, & Malvika Sharan



Evolving research and data landscape

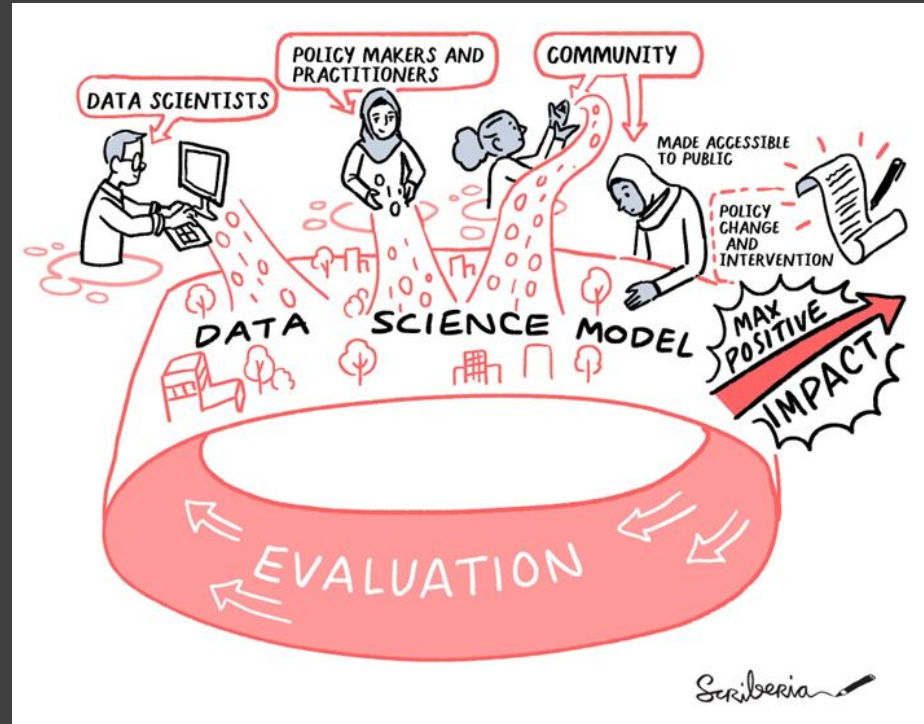
- Interdisciplinarity
- Widening Participation
- Commitment to EDIA
- Better research culture



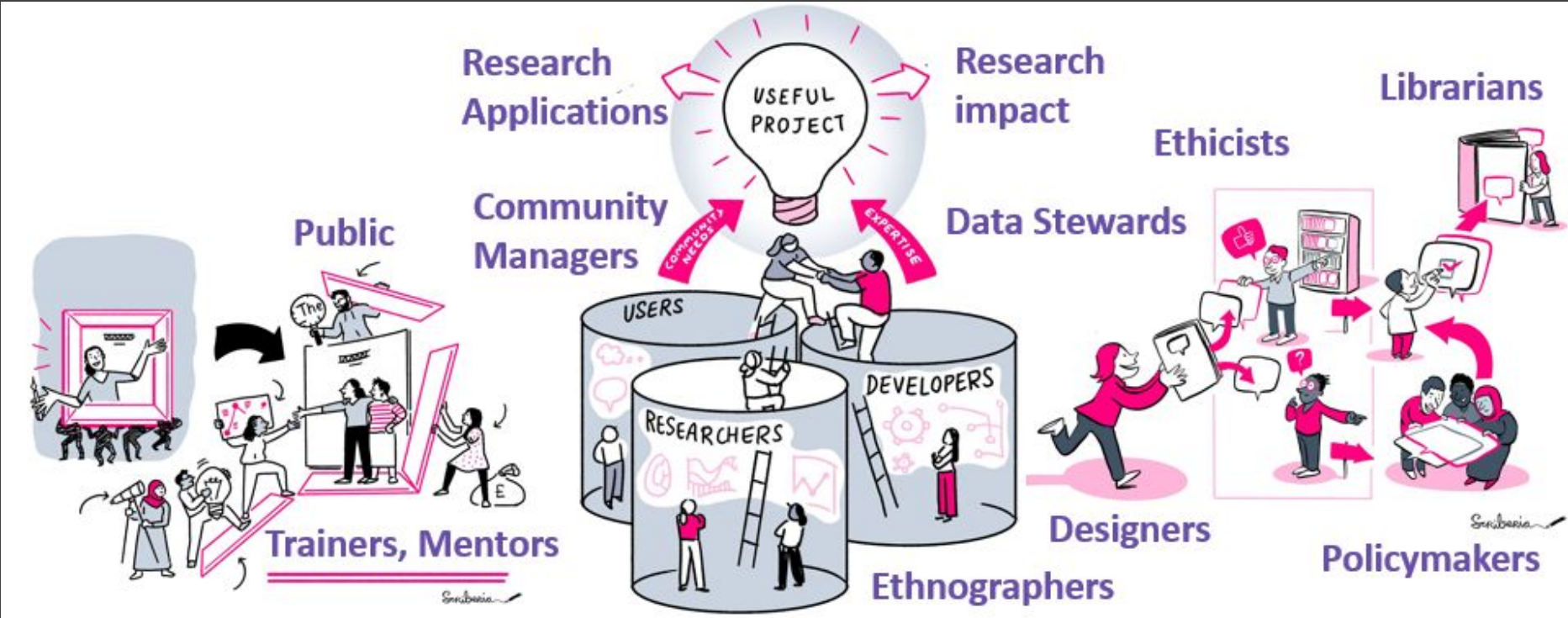
@malvikasharan, Presentation DOI:
10.5281/zenodo.7620215

Research infrastructure roles

Research infrastructure roles provide **specialised skills, expertise and services** required for effectively carrying out **high-quality research**.



Diversifying research roles



Tools, Practices and Systems

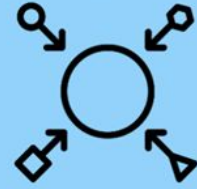
- Trustworthy systems
- Transparent reporting
- Inclusive interoperable design
- Ethical integrity
- Respectful co-creation
- Leadership in open research



Trust



Transparency



Inclusivity



Integrity



Respect



Leadership

Home + Research + Research programmes

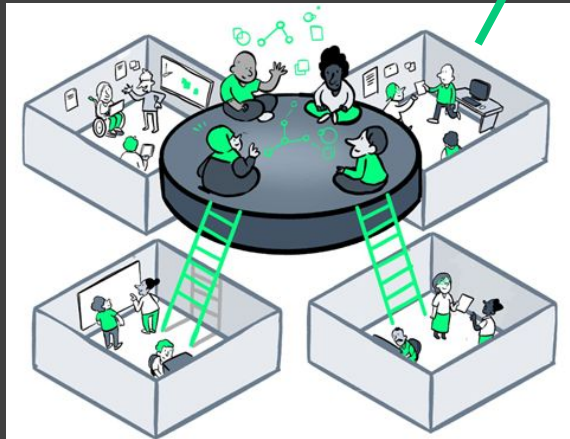
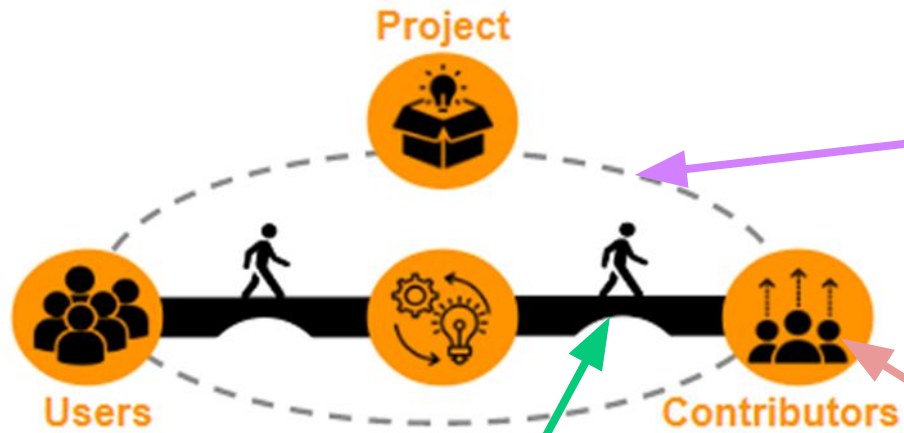
Tools, practices and systems

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



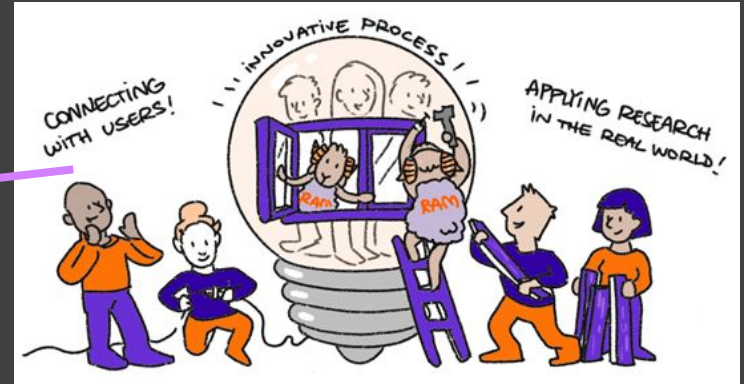
Dr Kirstie Whitaker
Director of the
programme

Strategic and technical support for stakeholder engagement and participation

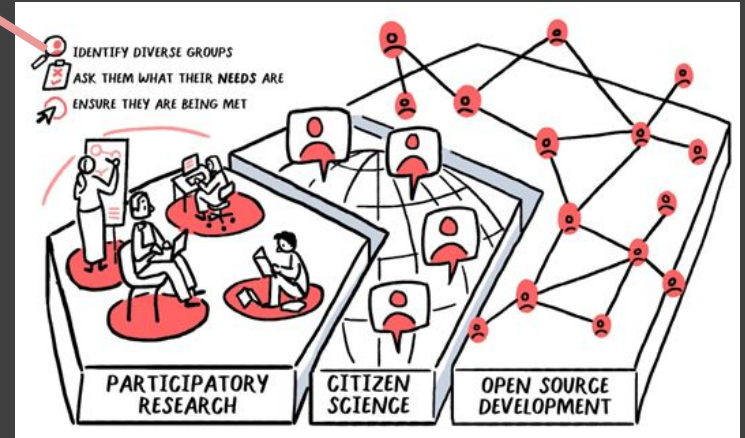


Research Community Management

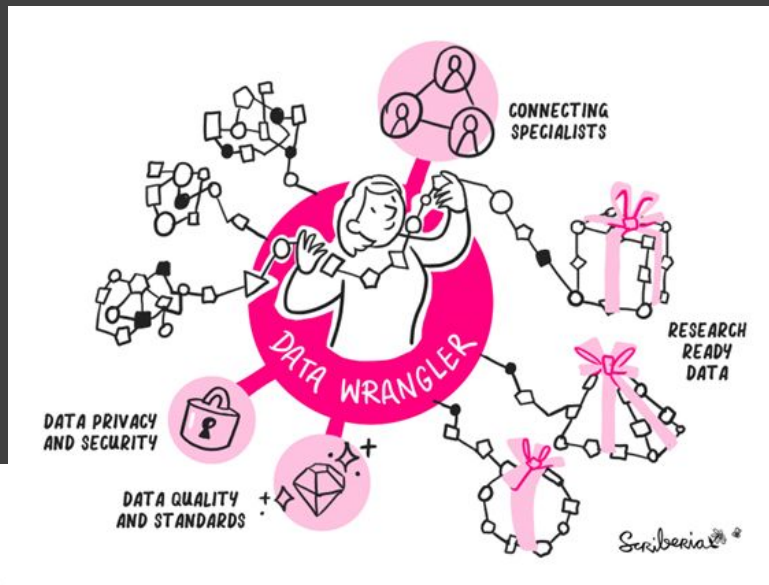
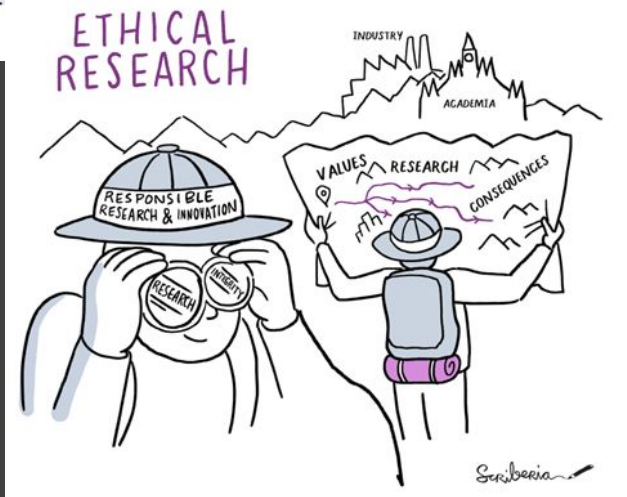
Research Applications



Participatory Citizen Science



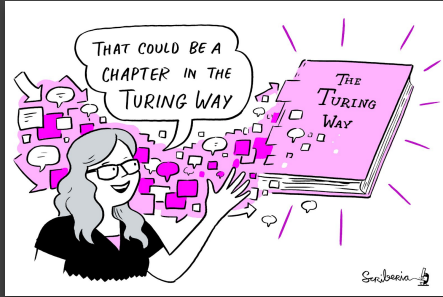
Also at Turing



The Turing Way

An Open Source guide on Data Science

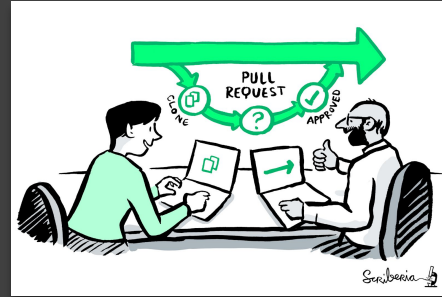
We involve and support a diverse community to make data science reproducible, ethical, collaborative and inclusive for everyone



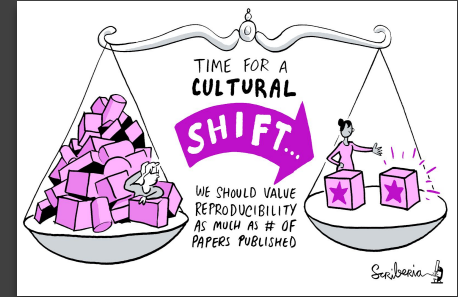
A book



A global community



An open-source project



A culture of collaboration

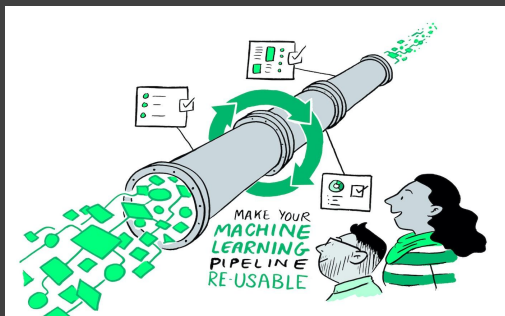
Guide for Reproducible Research

Guide for Reproducible Research

- Overview
- Open Research
- Version Control
- Licensing
- Research Data Management
- Reproducible Environments
- BinderHub
- Code quality
- Code Testing
- Code Reviewing Process
- Continuous Integration
- Reproducible Research with Make
- Research Compendia
- Credit for Reproducible Research
- Risk Assessment
- Case Studies



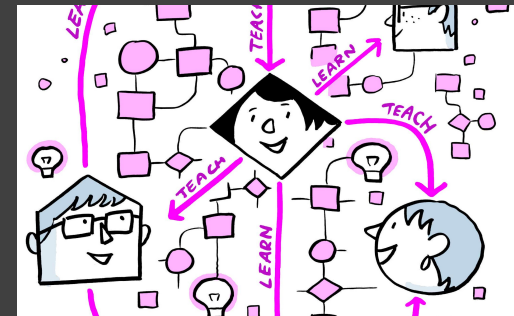
The Turing Way Guides



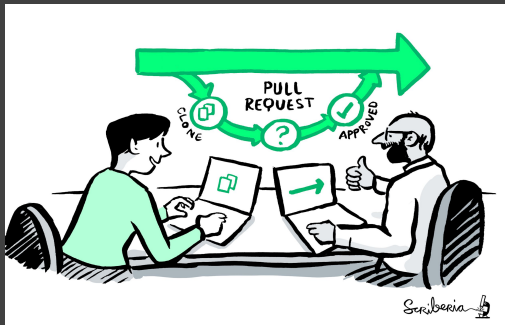
Reproducibility



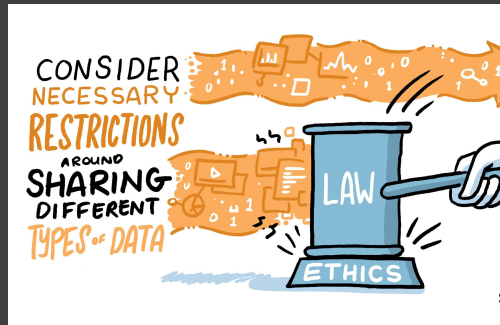
Project design



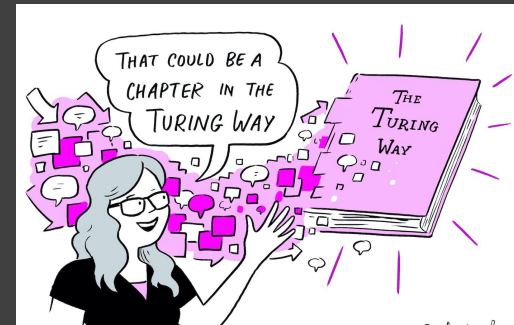
Communication



Collaboration



Ethical research



Community handbook

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

Guide for Collaboration ^

Getting Started With GitHub v

Maintainers and Reviewers on GitHub v

Organising Meetings

Organising Online Coworking Calls

Organising Conferences

Chairing Events

Participating in Events

Informal Coffee Chats

Tools for Facilitating
Collaboration

Managing a New Community
and Team v

Team Manual

Leadership in Data Science v

Research Infrastructure Roles v

Remote Collaboration v

Shared Ownership in Open
Source Projects v

Sustainability of Open Source
Projects

Guide for Collaboration

This guide covers topics related to effective and inclusive collaboration.

Data science is defined by its interdisciplinarity. Our work can only reach its highest potential if there are diverse teams of people involved in designing and delivering the research or product.



Fig. 91 There is more to collaboration than we see. *The Turing Way* project illustration by Scriberia. Used under a CC-BY 4.0 licence. DOI: 10.5281/zenodo.3332807.

There are many different skills required to work well in groups with a wide range of expertise. In this

Skills Policy Award Project - 'Professionalising traditional and infrastructure roles in data science'

Goals are:

- Curate & centralised definitions, role descriptors and skills lists
- Research community management paper
- Work with policy experts to bring findings to policy makers

See our Github repo for more info:

<https://github.com/alan-turing-institute/professionalising-data-science-roles>

Or get in touch with Emma
(ekaroune@turing.ac.uk)



Department for
[Digital, Culture,
Media & Sport](#)

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

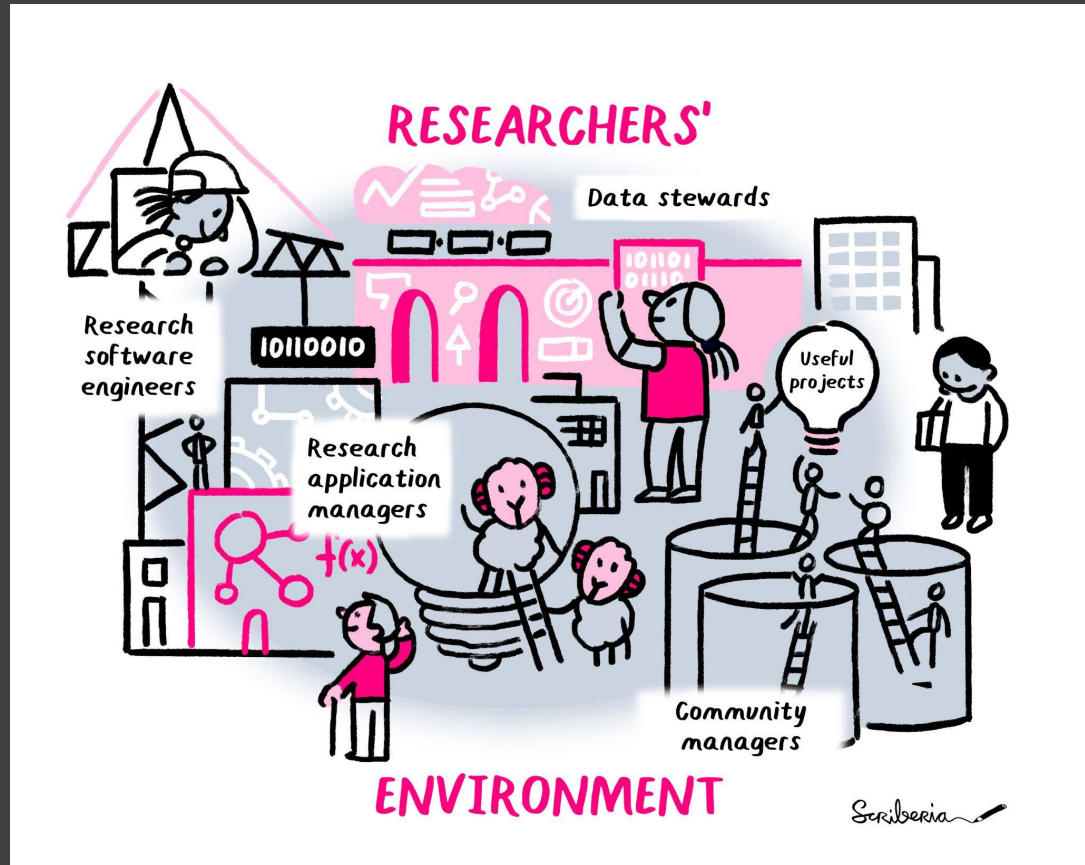
Policy paper
National Data Strategy
Updated 9 December 2020

! **Data skills**

There is no widely agreed definition of data skills. In this document we use the term broadly to cover the full range of basic, technical, governance and other skills – including project management, governance and problem solving – needed by practitioners to maximise the usefulness of data.

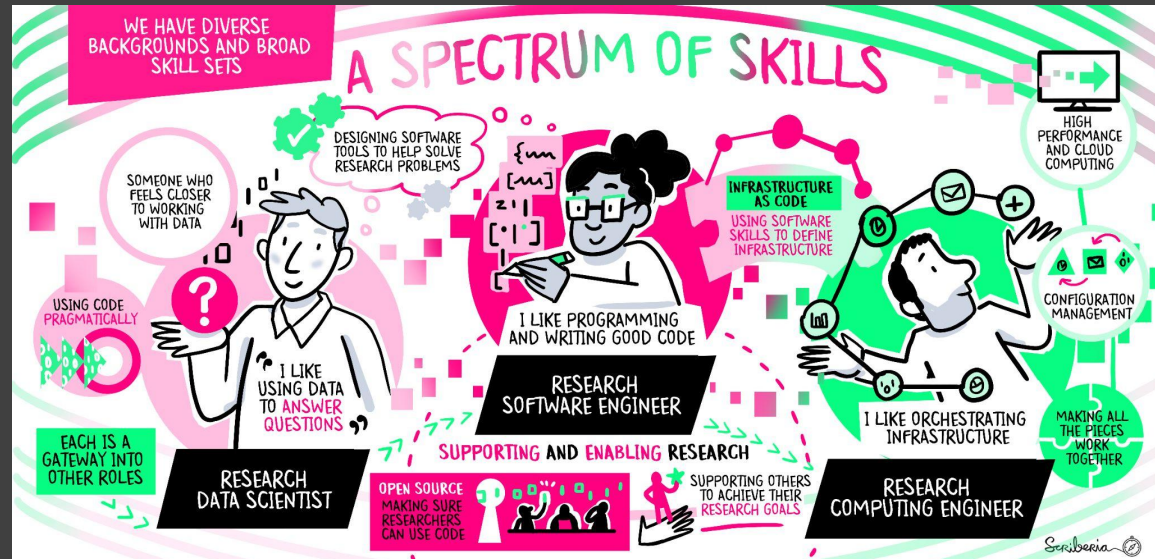
<https://www.gov.uk/government/publications/uk-national-data-strategy/national-data-strategy>

Examples of research infrastructure roles at Turing




Camila Rangel Smith

- PhD and postdoc in Experimental Particle Physics + couple of years working as Data Scientist in the private sector.
- Research Data Scientist at **Research Engineering Group (REG)** at the Turing since 2018, Senior Research Data Scientist since 2021.
- Worked in +10 projects since joining the Turing.

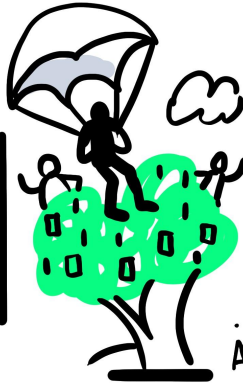


REG: ways of working



WE WORK WITH
MANY DIFFERENT
TYPES OF
RESEARCHERS

WE CAN PARACHUTE
INTO PROJECTS

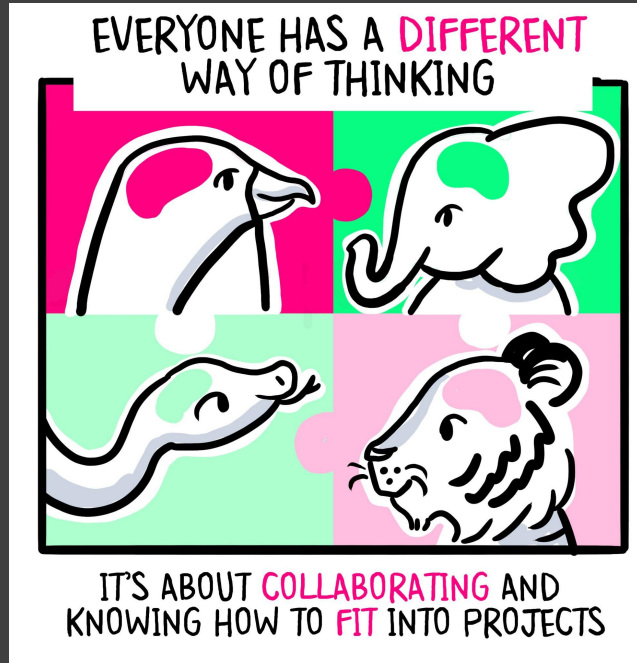


...OR START RIGHT
AT THE BEGINNING



HELP SHAPE
PROJECTS

REG values



Alexandra Araujo Alvarez

Research Project Manager, The Turing Way

- Involved in research since 2021
- Aim: Facilitate that every aspect of the project is done on time and within budget.



Hari Sood

Goal:

To enhance the real-world impact of research outputs by engaging external stakeholders and adapting outputs for real-world use.



Hari Sood

Why do RAMs exist?



Accelerate **adoption**
of research outputs



Enhancing **pathways**
to innovation



Increasing **participation**
& **diversity** among users
of research assets



Boosting **efficiency** of
the ecosystem

Emma Karoune

Research Community Manager

PhD in Archaeobotany

Interest and expertise in Open Research and community building

Came to work at Turing in Jan 2021 as research community manager on DECOVID

Now work across the Health programme



Emma Karoune

Research Community Manager

Embed open research practices

- Reproducible workflows
- Inclusive practices

Ensure shared understanding

- Document project goals, roadmap & processes
- Maintain GitHub archives

Facilitate stakeholder engagement & collaboration

- Stakeholder mapping
- Coworking/collaboration cafes

Provide technical support & domain expertise

- Data publishing - FAIR archiving of data and writing data papers

Co-create, maintain & communicate project resources

- Internal comms - Slack, newsletters

Amplify & champion learnings & achievements

- External comms - blogs, social media, conference talks
- Translation

Now we'd like to learn about your experience! (~20 min)

- In groups (about four people), you will discuss a question about your journey in research infrastructure
- Begin with intros!
 - What title did you want to be called?
 - What is your title now?
- Discuss your assigned question
- Feel free to tackle another question if you finished with your assigned one
- Don't forget to document your progress in the shared document

Breakout room discussions

Group 1: Journey to research infrastructure role

If you already hold a formalised research infrastructure role, please share how you got your role recognised/formalised?

Group 2: Career progression

What career pathways for progress look like for research infrastructure roles in your organisation?

Group 3: Types of roles in a project

In your project teams, what types of research infrastructure roles do your team members take?

Group 4: Wider recognition

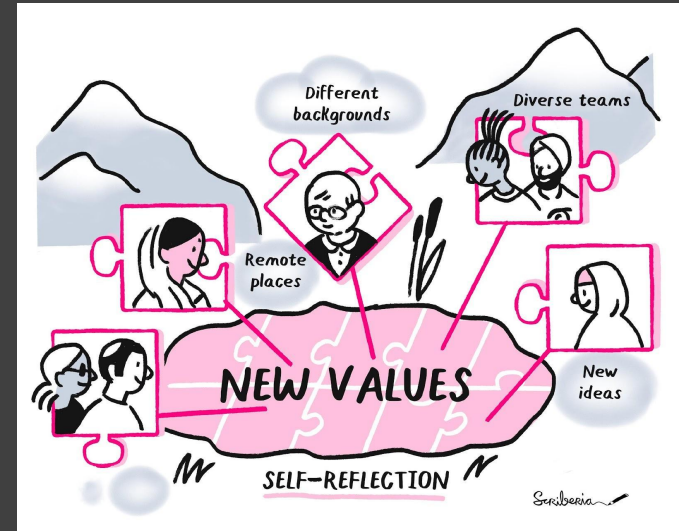
How do you feel research infrastructure roles are recognised within your institute/in the research landscape?

Connect with The Turing Way Community

- *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

Fireside Chat

Join us for our May
Fireside Chat!

5 May

14:00 - 15:30 UTC+1

Register on Eventbrite:

[https://tinyurl.com/ttw-
may-2023](https://tinyurl.com/ttw-may-2023)

Implementing open science at scale

5 May, 14:00 - 15:30 UTC+1 – *Register on Eventbrite*



Alex Mendonça

Online Submission & Preprints
Coordinator
SciELO



Chelle Gentemann

Program Scientist for Transform
to Open Science
NASA



Ana Persic

Programme Specialist at the
Section of Science Technology
Innovation Policy
UNESCO



Steve Crawford

Senior Program Executive for
Scientific Data & Computing
NASA



Nokuthula Mchunu

Deputy Director
Africa Open Science Platform



Malvika Sharan

Senior Researcher
The Alan Turing Institute



Hosted
by:



Feedback



Help us to improve this workshop!

<https://forms.gle/gaJtpBLDE4Jy9L2r7>

The Alan Turing Institute

Acknowledgements:

- The Turing Way team, Kirstie Whitaker, Malvika Sharan, Anne Lee Steele, Alexandra Araujo Alvarez
- *The Turing Way* community, contributors & collaborators
- Book: the-turing-way.netlify.com
- Twitter: twitter.com/turingway / Mastodon: <https://fosstodon.org/@turingway>
- 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>

