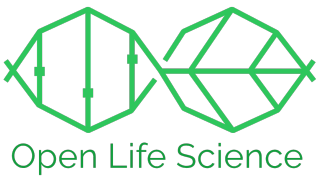
The Alan Turing Institute

Ethical standards and reproducibility of computer models in Neurobiology

Susana Roman Garcia, PhD student.

16 week (Sep 22 - Jan 23) project in collaboration with:



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With special thanks to:

- Siobhan Mackenzie Hall, OLS mentor.
- Melanie Stefan, David Sterratt, Nicola Romano, PhD supervisors.
- Claudia Fischer, Alan Turing Institute guidance.
- Everyone at OLS and anyone who came along the journey.

Contents

1.Project background

1.1. Aim and motivation of this project:

Offer a case study example of how to create a PhD that looks at reproducibility and ethics as part of the process, not as an add-on.

- To tackle reproducibility issues and stop wasting money, time and resources in general.
- Reproducibility only makes sense if bias is accounted for too. Otherwise, oppressive biases carry on without being questioned.
- Bias: inclination or prejudice for or against a certain group, especially in a way considered to be unfair.

2. Process

2.1. Goals achieved, key understandings.

Create a written guide for looking at bias and reproducibility in a PhD.

- For other people to use as an example.
- Will embed with PhD thesis, in process.

Look at speciesist bias and reproducibility in Computational Neurobiology.

- Quantifying speciesist bias in literature to showcase importance.
- Lots of brainstorming. Lots of hours spent deciding which questions to ask.
- Lots of time spent looking for templates of other people's work.

Publish results...contained in GitHub for now.

2.2. So...did I accomplish the same as goals originally set?

Kind of...

- I ended up learning a lot more about how GitHub works,
- About licencing my work,
- About making more open, accessible work,
- Making contacts, reading a lot.

3. Outcomes

3.1. Transferrable skills for future projects.

Project Collaboration the Turing Institute.

- Keyword extraction to create quantitative analysis of speciesist bias in Computational Neuroscience papers.

Data Hazards, Ethics and Reproducibility Symposium, 10th March (Hybrid).

Thank you for listening.

- Want to chat? s1350728@ed.ac.uk
- Come to/share the one-day symposium!