Nathanael Sheehan
PhD Student

Curriculum Vitae
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About

I am Nathanael Sheehan (he/him) a first year doctoral candidate at the University of Exeter, where my research focuses on the "Diversity and Injustice of Open Research Environments". This research is generously funded by the EPSRC Centre for Doctoral Training in Environmental Intelligence and is a component of the project "Philosophy of Open Science for Diverse Research Environments" run by Professor Sabina Leoneli. My doctoral research seeks to construct an empirically informed philosophy of Open Science (OS) that acknowledges the varied research environments globally and strives to delineate the circumstances wherein OS can harness this diversity to foster exemplary research practices. To address these conditions, I develop a philosophical analysis of the epistemic significance of research environments with quantitative research on how researchers working in different environments enact and conceptualize OS, specifically within the spheres of virology and global health. My methodological framework draws inspiration from the "philosophy of science in practice" (PSP) approach, providing a comprehensive lens to explore the nuances of OS and facilitate fruitful collaborations between scientists and policymakers. Central to my thesis is the objective of critically re-envisioning OS. I aim to shift the perception of OS from an object-oriented perspective, which perceives it as a capitalist paradigm built on perpetual growth and speculative profit, to an ethical understanding that positions openness as the cultivation of judicious collaborations amongst researchers.

Education

2014-2018	**BSc Computer Science (1st)** Manchester, UK	Manchester Metropolitan University
2019-2020	**Master of Smart Cities and Urban Analytics (Distinction)** London, UK	University College London
2021-2025	**PhD Environmental Intelligence** Exeter, UK	Exeter University

Work Expereince

2017-2019	**Software Engineer** London, UK	RetalMeNot
2020	**Research Assistant** Remote	University College London
2021	**Geographical Information System Engineer** Remote	Bristol City Council
2021	**Research Engineer** Remote	Oxford University
2021-2022	**Research Fellow** Remote	Leeds University
2024	**Research Assistant** Exeter, UK	Exeter University

Research Publications

➤ Talbot, J., Lucas-Smith, M., Speakman, A., Streb, M., Nuttall, S., Carlino, D., Johansson, P., Sheehan, N., Groot, N., & Lovelace, R. (2022). Active Travel Oriented Development: Assessing the suitability of sites for new homes. European Journal of Transport and Infrastructure Research, 22(4), 51–72. https://doi.org/10.18757/ejtir.2022.22.4.6015

➤ Sheehan, N., Botta, F. and Leonelli, S. (2024) 'Unrestricted Versus Regulated Open Data Governance: A Bibliometric Comparison of SARS-CoV-2 Nucleotide Sequence Databases', Data Science Journal, 23(1), p. 29. Available at: https://doi.org/10.5334/dsj-2024-029

➤ Sheehan, Nathanael & Leonelli, Sabina, Reconciling Data Actionability and Accountability in Global Health Research. Available at: https://philpapers.org/rec/SHERDA-4

Research Software

➤ Joseph Talbot, M. L.-S., Nathanael Sheehan. (2021). ActDev.
➤ Robin Lovelace, L. H., & Sheehan, N. (2021). Pct: Propensity to cycle tool.
➤ Sheehan, N. (2022). Thames21 socio-ecological data.
➤ Sheehan, N. (2022). Dimaqdata: Data integration model for air quality data.
➤ Sheehan, N., Lovelace, R., Nederlof, T., & Carlino, D. (2022). Abstr: R interface to the a/b street transport system simulation software.
➤ Sheehan, N (2022). IndoorRSSI: Indoor Received Signal Strength Indicator
➤ Sheehan, N (2023). eaCatcheR: The eaCatcheR R package provides an interface to data from the environment.data.gov.uk catchment planner.
➤ Sheehan, N (2023). Gigwork Stories: Doing Gig Work, a research project which studies the management, solidarity and resistance of platform food couriers in Manchester (UK), Cluj-Napoca (Romania) and Lyon (France).
➤ Sheehan, N (2023). C2A: CTA contains the code and data used to produce the results presented in the paper "From collection to analysis: A comparison of GISAID and the Covid-19 Data Portal.

Research Presentations

2020	**Digital Ecologies, Online**	
	Performing digital water publics: a computational approach	
2021	**Decarbon8, Online**	
	Working with origin-destination and activity data to model decarbonisation	
2021	**Intelligent Machines, Emotions, and Our Planet, Online**	
	Linking Sentiment with River Health in the Thames Basin	
2021	**Modelling World, Online**	
	The ActDev Project	
2022	**Data Crunch, Online**	
	Open Data in the Private Industry	
2022	**Philosophy of Open Science open meeting, Online**	
	Responsible Repositories	
2022	**PhilInBioMed conference, Pittsburgh**	
	Analysis of COVID-19 sequencing platforms	
2023	**Research Data Alliance, Gothenburg**	
	Analysis of COVID-19 sequencing platforms	
2023	**Institute for Data Science and AI, Exeter**	
	Analysis of COVID-19 sequencing platforms	
2023	**PHIL_OS Exploratory Conference, Exeter**	
	Open Data and Software in Science	
2023	**International Society for the History, Philosophy and Social Studies of biology, Toronto**	
	Covid-19 Genomic Data: Diverse Enough?	
2024	**Understanding Life in a Changing Planet , Exeter**	
	Between Open and Closed Data: A metascientific study on global health data practices	