

Manikya Alister

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Office Address: Level 8, Melbourne Connect,

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Education

Doctor of Philosophy (Cognitive Science)

2022 – 2025 (expected)

The University of Melbourne

Melbourne, Australia

Thesis topic: *Learning from others: A computational and experimental study of how social reasoning shapes human inference*

Computational Modelling of Language Summer School

August, 2022

The University of California, Irvine.

Irvine, USA

Accepted with full scholarship and travel grant.

Bachelor of Psychological Science (Honours Class 1)

2017 – 2020

The University of Queensland (UQ)

Brisbane, Australia

Thesis: *The effect of deliberation time on multiple goal pursuit*

GPA: 6.8/7

Selected Honours & Awards

University Medal Awarded to top ~2% of graduates across whole university 2020

Australian Psychological Society Prize #1 ranked graduate in cohort (of ~250 students) 2020

McElwain Prize Best Honours thesis in the School of Psychology 2020

Selected Publications

Alister, M., Herbert, S., Sewell, DK., Neal, A. Ballard, TJ., (Under Review). The Impact of Cognitive Resource Constraints on Goal Prioritization. [Preprint](#).

Alister, M., McKay, KT., Sewell, DK., Evans, NJ., (2023). Uncovering the Cognitive Mechanisms Underlying the Gaze Cueing Effect. *Quarterly Journal of Experimental Psychology*. [Link](#).

Alister, M., Ransom, KJ., Perfors, A. (2023, in pres). Inferring the truth from deception: What can people learn from helpful and unhelpful information providers? *Proceedings of the Annual Meeting of the Cognitive Science Society* 45 (45). [Link](#).

Alister, M., Vickers-Jones, R., Sewell, DK., Ballard, TJ., (2021). How do we Choose Our Giants? Perceptions of Replicability in Psychological Science. *Advancements in Methods and Practices in Psychological Science*. [Link](#).

Selected Scholarships & Funding \$217, 605 AUD Total

Cognitive Science Society Travel Award **\$1,780** 2023

UC Irvine Travel Scholarship **\$750 + food and accomodation** 2022

Research Training Scholarship (tuition + living stipend for PhD) **\$208,075** 2022-2025

UQ Summer Research Scholarship **\$7000** 2018 & 2019

Selected Experience

Research Associate, University of Adelaide/Defence Science May 2023 – Present

I have been hired part time to help build a software prototype that leverages state of the art LLMs and empirically grounded computational models of belief formation to map, track, and analyse how different narratives emerge on social media and how they influence the information environment. Particularly, I am using powerful NLP libraries such as BERTopic and other transformer based tools to analyse real and synthetically generated social media data sets, as well as JavaScript libraries such as D3 to build interactive data visualisation software.

Freelance Data Scientist August 2022 – Present

Good Data Institute: Consolidated their internal database of volunteers and automated their intake processes. Designed and deployed a web-based dashboard using R shiny that informs and visualizes several aspects of their organisation including diversity and equity and project impact.
QLD Mind Project: Consulted on data analysis and implemented reproducible Bayesian and frequentist statistical models using R.

Doctoral Candidate, University of Melbourne Jan 2021 – 2025 (expected)

Led all aspects of several research studies that involved collecting data from over 2,000 participants, implementing web-based surveys and gameified experimental tasks, and coordinating research teams made up of interstate and international personnel. Applied Bayesian and Frequentist quantitative analysis techniques to generate insights from multiple diverse data sets. Communicated insights to different audiences in 5+ empirical research papers and 8+ presentations at domestic and international scientific conferences.

Academic Tutor Feb 2021 - Present

In this position, I deliver lectures, facilitate workshops, and prepare course materials for 40-80 students per semester. Subjects I have taught include:

PSYC30013: Research Methods for Human Inquiry (University of Melbourne – current)

PSYC2371: The Science of Everyday Thinking

PSYC1030: Introduction to Developmental, Social, and Clinical Psychology (**promoted to lead tutor** after one semester)

Skills

Data Analysis Specialising in Bayesian statistical & computational modelling

Programming R (incl. Shiny), Python, JavaScript, CSS, HTML, Stan

Other programs/software Github, LaTeX, SPSS, Jamovi, Qualtrics, Microsoft Office

Research design With experience designing and implementing novel experiments, replications, and surveys across multiple platforms and software.

Spoken Languages English (native), Spanish (conversational)

Referees

Provided upon request