

Joshua Corbett

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<https://joshjcorbett.github.io/>

EDUCATION

2022-2024 MPhil (Cognitive Neuroscience), University of Melbourne (finished February 2024)
2018-2021 Bachelor of Psychology (Psychology and Neuroscience), University of Sydney -
First class honours and the University Medal. **Weighted average mark: 93**

RESEARCH FUNDING

2022 **\$16,000 AUD** grant awarded by the Melbourne School of Psychological Sciences to conduct highly novel research using the 7-Tesla MRI scanner at the University of Melbourne
2022 Research Training Program Stipend and Fee Offset - **\$125,000 AUD** funding for living expenses and tuition fees during MPhil at the University of Melbourne
2021 Denison Research Scholarship - **\$3000 AUD** scholarship for a four-week formal research internship at the University of Sydney

AWARDS AND HONOURS

2022 University Medal recipient, University of Sydney
2021 Lithgow Scholarship VII, awarded for the highest average mark across senior undergraduate psychology units, University of Sydney
2019-2021 Dean's List of Excellence in Academic Performance - award received each year from 2019-2021 for undergraduate excellence (yearly average mark greater than 85), University of Sydney

CONFERENCE AND INVITED TALKS

2023 Australasian Cognitive Neuroscience Society annual meeting: 'Top-down vs bottom-up origins of sensory uncertainty in early visual cortex' (Open Talk)
2023 Predictive Brain Lab (PI: Floris de Lange), Donders Institute for Brain, Cognition, and Behaviour
2023 Visual Perception Lab (PI: Peter Kok), University College London
2023 Layer-fMRI special interest group, Donders Institute for Brain, Cognition, and Behaviour
2023 Flash talk at the Cognitive Neuroscience Hub rebranding event, University of Melbourne (best student presentation award)

PREPRINTS

Holcombe, A. O., & **Corbett, J. J.** (2023, December 20). Temporal errors: Researchers should stop studying the flash-lag effect. <https://doi.org/10.31234/osf.io/swzr7>

SKILLS

- Computer programming (Python, R, MATLAB, shell scripting)
- 7T fMRI
- Experimental design
- High performance computing
- Statistics
- Machine learning
- Github
- Psychophysics

TEACHING

2023 TA for *Research Methods for Human Inquiry* (PSYC30013), University of Melbourne
2022 TA for *The Integrated Brain* (PSYC30020), University of Melbourne
2022 TA for *Neuroscience and the Mind* (PSYC30018), University of Melbourne

OPEN SCIENCE

I am committed to transparent science that is openly accessible. To this end, I have published code on Github for running experiments and performing statistical analyses (<https://github.com/joshjcorbett>), and have made contributions to existing open source software (<https://github.com/jeheelab/TAFKAP>).

SCIENCE COMMUNICATION

I am passionate about presenting science to broader audiences. In line with this, I recently volunteered to present my MPhil research at a public event showcasing cognitive neuroscience research at the University of Melbourne. This talk was recorded and made available online (https://youtu.be/HRmnTnmv_Z4?si=1IFCXP55IEyiKrZD).

OTHER RESEARCH EXPERIENCE

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| 2022-2024 | MPhil thesis – I conceived of, designed, and conducted a novel layer-specific fMRI study investigating how sensory uncertainty is encoded. This was the first layer-specific fMRI study conducted at the University of Melbourne, meaning that I was responsible for sequence optimisation and developing a custom pre-processing pipeline for this data |
| 2023- | Research assistant for Dr Sarah Tashjian – I am currently developing a custom pre-processing and analysis pipeline for 7T fMRI data acquired with adolescent participants |
| 2021 | Fourth-year psychology honours thesis – I conceived of, designed, and conducted three psychophysical experiments investigating the role of attention in a novel visual illusion. This thesis was conducted under the supervision of Professor Alex Holcombe at the University of Sydney (https://thesiscommons.org/n5v4b) |
| 2021 | Summer science research internship – I designed and coded a psychophysical experiment testing the fidelity of visual imagery, under the supervision of Professor Thomas Carlson and Dr Alexander Sulfaro |
| 2019-2020 | Volunteer research assistant in the Social Cognition and Individual Differences Lab at the University of Sydney, assisting Dr James Morandini and Associate Professor Ilan Dar-Nimrod with data collection and experimental design |

EXTRACURRICULAR INVOLVEMENTS

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| 2022-2024 | Committee member and peer mentor for the Graduate Researchers in Psychological Sciences Society, University of Melbourne |
| 2018-2021 | Sponsorship officer for the University of Sydney Film Society |