Katie Warburton

✉ kwarburton@cs.toronto.edu | 🏠 katiewarburton.com | in www.linkedin.com/in/katie-warburton

Education

Ph.D. in Cognitive Science
2021 - present

University of Melbourne; University of Toronto
Melbourne, Australia; Toronto, Canada
- **Supervisors**: Charles Kemp, Yang Xu, Lea Frermann
- Jointly awarded degree from the UofT-UoM International Research Training Group

B.Comp (Hons) with a Specialization in Cognitive Science
2017 - 2021

Queen's University
Kingston, Canada
- GPA: 4.2/4.3
- Received the medal in computing which is awarded to the student who has achieved the highest standing in a plan offered by the awarding department.

Research Experience

UofT-UoM International Research Training Group
Sept. 2021 - Present

Doctoral Candidate
- **Thesis**: The Structure and Evolution of Hierarchical Category Systems
- **Supervisors**: Charles Kemp, Yang Xu, Lea Frermann
- Previously developed computational methods for quantifying structural biases in hierachical category systems
- Currently combining computational and experimental methods to explore order effects in hierachical category systems

Queen's School of Computing
May 2020 - April 2021

Undergraduate Thesis
- **Title**: Using Correlations of Word Frequency to Find Clusters in Unstructured Radiology Reports
- **Supervisor**: Randy Ellis
- Researched and implemented methods for the natural language processing of lung cancer radiology reports
- Applied topic modeling and clustering algorithms to aid in report processing
- Received an NSERC Undergraduate Student Research Award to work on this project over the summer.

Dept. of Languages, Literatures and Cultures, Queen's University
June 2019 - Aug. 2019

Undergraduate Research Assistant
- **Supervisors**: Nathan Thanyehténhas Brinklow, Lorena Jessop
- Assisted with the development of an automatic speech recognition model for Kanyen'kéha, a polysynthetic language

Publications

Warburton, K., Kemp, C., Xu, Y. & Frermann, L. (2024). Quantifying bias in hierarchical category systems. *Open Mind: Discoveries in Cognitive Science, 8*, 102-130.

Warburton, K., Kemp, C., Xu, Y. & Frermann, L. (2023). Quantifying bias in library classification systems. *Proceedings of the Annual Meeting of the Cognitive Science Society, 45*.

Presentations

Warburton, K, Kemp, C., Xu, Y. & Frermann, L. (July, 2023). *Quantifying Bias in Library Classification Systems*. Annual Meeting of the Cognitive Science Society, Sydney, Australia. Conference Poster.

Teaching Experience

University of Melbourne *Melbourne, Australia*
Academic Tutor *2024-Present*
- **PSYC30013**: Research Methods for Human Inquiry (Semester 1 2024)

University of Toronto *Toronto, Canada*
Guest Lecture *November 2022*
- **Title**: Quantifying Biases in Library Classification Systems
- **Course**: Data, Computation, and The Mind (COG260).

University of Toronto *Toronto, Canada*
Teaching Assistant *2021-2022*
- **CSC199**: Intelligence, Artificial and Human (Fall Term 2022)
- **CSC2611**: Computational Models of Semantic Change (Fall Term 2022)
- **CSC110**: Foundations of Computer Science (Fall Term 2021)

Queen's University *Kingston, Canada*
Teaching Assistant *2018-2021*
- **CISC352**: Artificial Intelligence (Winter Term 2021)
- **COGS201**: Cognition and Computation (Fall Term 2019; 2020)
- **COGS100**: Introduction to Cognitive Science (Summer Term 2019; Winter Term 2020)
- **CISC121**: Introduction to Computer Science (Fall Term 2018)

Awards

2021	**Medal in Computing**, Queen's University
2020	**NSERC Undergraduate Student Research Award**, Queen's University
2018-2021	**Dean's Honour List**, Queen's University

Service & Outreach

2024 - 2025	**Graduate Researchers in Psychological Sciences (GRiPS)**, President	*University of Melbourne*
2023	**Science Rendevous UofT**, Volunteer	*University of Toronto*
2019 - 2020	**Computing Students Association**, Governance & Internal Affairs Director	*Queen's University*

Skills

Programming Languages: Python, Javascript, R, MATLAB, Prolog, Java.
Other: LaTeX, HTML/CSS, SQL, and Markdown.