Curriculum Vitae

Brendan Conway-Smith

Ottawa, ON

Citizenship: Canadian

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Education

2025(expected) Ph.D. in Cognitive Science, Carleton University

Thesis: Metacognitive Skill Learning: A Computational Account

2020 Master of Cognitive Science, Carleton University

Thesis: Clarifying Metacognition Through Computational Modeling

B.A. in Psychology, *Cum Laude*, Ottawa University

Major Psychology, Major Political Science

Employment

Contract Instructor, Carleton University

2023/24 Fall/Winter (Sept. – April)

Thinking and Knowing – FYSM 1607 C

Responsibilities: Creating course content, marking, lecturing.

2023 Winter (Jan. – April)

Theories in Cognitive Science - CGSC 2001D

Responsibilities: Creating course content, marking, lecturing.

2022 Fall (Sept. – Dec.)

Theories in Cognitive Science - CGSC 2001B

Responsibilities: Creating course content, marking, lecturing.

2021 Summer (July-Sept.)

Theories in Cognitive Science - CGSC 2001B

Responsibilities: Creating course content, marking, lecturing.

Teaching Assistant, Carleton University

2022 - Methods in Cognitive Science - CGSC 2002B

Instructor: Nadiya Slobodenyuk

Responsibilities: Lecturing, lab instructing, marking assignments.

2021 - Theories in Cognitive Science - CGSC 1001B

Instructor: Rebecca Merkley

Responsibilities: Lecturing, marking assignments, office hours.

2018 - 2021 - Mysteries of the Mind - CGSC 1001

Instructor: Jim Davies

Responsibilities: Marking essays, office hours, lecture attendance.

2017 - Cognitive Psychology - PSYC 2700

Instructor: Robert West

Responsibilities: Host discussion groups, office hours, marking.

Awards and Honours

2024 SSHRC Doctoral Fellowship

Social Sciences and Humanities Research Council

Awarded for outstanding research in Cognitive Science.

(Amount: Up to \$80,000)

2023 Ontario Graduate Scholarship (OGS).

2022 Cognitive Science Graduate Scholarship.Awarded annually to outstanding graduates in Cognitive Science.

2021 Lew Stelmach memorial scholarship - awarded to students who demonstrate excellence in the area of perception or cognition.

- 2020 Kevin Sampson Graduate Scholarship awarded annually to students doing research in Human or Artificial Cognition.
- 2019 Hamlin graduate scholarship (nominated) awarded annually by the Dean of Graduate and Postdoctoral Affairs to outstanding students.
- 2018 TA Award for Excellence Department of Cognitive Science, Carleton.
- 2018 The Mindtrust Leadership Development Program leadership certificate.

Publications

- Conway-Smith, B., & West, R. L. (In press 2024). The computational mechanisms of detached mindfulness. In *Proceedings of ICCM 2024, 22nd International Conference on Cognitive Modelling*.
- Conway-Smith, B., & West, R. L. (2024). Toward autonomy: metacognitive learning for advanced AI performance. In *AAAI Spring Symposium: Human-like learning*.
- West, R., Eckler, S., Conway-Smith, B., Turcas, N., Tomkins, E., Kelly, M. (2023). Bridging generative networks with the common model of cognition. In *AAAI Fall Symposium*.
- Conway-Smith, B., & West, R. L. (2023). Metacognitive threshold: a computational account. In *Proceedings of ICCM 2023, 21st International Conference on Cognitive Modelling*.
- Conway-Smith, B., West, R. L., & Mylopoulos. (2023). Metacognitive skill: how it is acquired. In *Proceedings of the Annual Conference of the Cognitive Science Society*.
- Conway-Smith, B., & West, R. L. (2022). System-1 and System-2 realized within the Common Model of Cognition. In *AAAI Fall Symposium: Thinking Fast & Slow and Other Cognitive Theories in AI*.
- Conway-Smith, B. & West, R. (2022). Clarifying System-1 & 2 through the common model of cognition. In *Proceedings of ICCM 2022, 20th International Conference on Cognitive Modelling*.
- West, R., & Conway-Smith, B. (2019). A computational theory of feeling. In *Proceedings of ICCM 2019, 17th International Conference on Cognitive Modelling*.

Conferences & Presentations

2024

"Toward Autonomy: Metacognitive Learning for Enhanced AI Performance." AAAI Spring Symposium on Human-like learning. Stanford, USA.

2023

- "Metacognitive threshold: a computational account." 21st International Conference on Cognitive Modelling (ICCM). Amsterdam, Netherlands.
- "Metacognitive skill: how it is acquired." Carleton University graduate conference. Ottawa, Canada.

2022

- "Meta-reasoning and the influence of culture." Meta-reasoning conference. Jerusalem, Israel.
- "System-1 and System-2 realized within the Common Model of Cognition." AAAI Fall Symposium: Thinking Fast & Slow and Other Cognitive Theories in AI. Virginia, USA.
- "Clarifying Metacognition System 1 & 2 with the Common Model." In Proceedings of the 44th Annual Meeting of the Cognitive Science Society. Toronto, Canada.
- "ACT-R workshop presentation." In Proceedings of ICCM 2022, 20th International Conference on Cognitive Modelling, Toronto, Canada.
- "Clarifying System 1 & 2 through the Common Model of Cognition." In Proceedings of ICCM 2022, 20th International Conference on Cognitive Modelling, Toronto, Canada.

2021

- "The Proceduralization of Metacognitive Skills." Proceedings of the Annual Meeting of the Cognitive Science Society. Virtual.
- "Metacognitive Skill Acquisition." presentation at the annual Conference at Carleton University, Ottawa, ON.

2020

- "A Hierarchical Model of Metacognition." Proceedings of the 42th Annual Meeting of the Cognitive Science Society.
- "Modeling Metacognition." Departmental Colloquium, Carleton, ON

2019

"Metacognitive Modeling; using cognitive modeling to clarify philosophical metacognitive concepts." Annual conference CogSci. Mtl, QB

Technical Skills

Statistical Analysis & Modeling: Proficient in SPSS for statistical analysis and data interpretation.

Cognitive Modeling: Experienced with ACT-R for cognitive modeling, demonstrating advanced understanding of cognitive architectures.

Programming & Development: Skilled in Python for data analysis, automation, and scripting tasks.

Graphic Design & Video Editing: Skilled in Adobe Photoshop for image editing and graphic design; experienced with DaVinci Resolve for professional video editing.

Selected Professional Activities

- 2024 Submission reviewer for the International Conference on Cognitive Modeling (ICCM)
- 2023 Consultation on FUSION metacognition e-learning modules, Carleton University.
- 2023 TEDx "Metacognition: an important skill for modern times"
- 2022 Re-branding and marketing for AI Guides company.
- 2022 Construction of a model of metacognitive accuracy. In collaboration with the Medical University of Graz, Austria.
- 2021 The Conversation (article) "How metacognition thinking about thinking can improve the mental-health crisis."
- 2021- Submission reviewer for the International Conference on Cognitive Modeling (ICCM)
- 2018-24 Graduate Student Association Councillor
- 2018 The Mindtrust Leadership Development Program
- 2017 Stanford "Writing in the Sciences," with distinction
- 2015-16 Director of Media Operations, Global Dignity Canada
- 2012 Participant, Dr. David Vago, Neuroimaging Laboratory, Harvard