

Tiwa Eisape

Machine learning, Natural Language Processing, Cognitive Science
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Academic Positions

- 2025 – Postdoctoral Researcher, Princeton University
Advisors: Tom Griffiths, Adele Goldberg
- 2022 – 2025 Student Board Member, Cognitive Science Society

Education

- 2025 Ph.D, Cognitive Science, MIT
Advisors: Roger Levy, Yoon Kim
- 2019 B.S, Computer Science with Minor in Philosophy, Boston College
Advisors: Joshua Hartshorne, Stefano Anzellotti

Research Positions

- 2024 FAIR Labs (Meta AI), Research Scientist Intern
Supervisors: Adina Williams, Karen Ullrich
- 2023 Google AI, Student Researcher
Supervisors: Tal Linzen, Fei Sha
- 2019 Vimeo Machine Learning, Research Scientist Intern

Honors & Awards

- 2025 Presidential Postdoctoral Fellowship (Princeton)
- 2021 Graduate Research Fellowship (NSF)
- 2019 GEM Full Fellowship (InterActiveCorp/GEM Consortium)
- 2016 Ronald E. McNair Scholarship (TRIO)
- 2019 Dean of Sciences Fellowship (MIT)
- 2019 Presidential Fellowship (MIT)
awarded & declined
- 2019 Matthew R. Copithorne Scholarship (Boston College)
- 2021 Walle Nauta Teaching Award (MIT)
- 2019 Order of the Cross and Crown (Boston College)

Advising

- 2022 – 2023 Jesus Crespo, MIT, M.Eng '23, Computation and Cognition, MIT
Head-Seeking RNNs: On the Relationship between Top-down Prediction and Evidence Integration in Parsing.
- 2023 Zhe Su, Machine Learning (CMU)
- 2022 – 2023 Vineet Gangireddy, Applied Mathematics (Harvard): *A Computational Approach to Recontextualization in Human Reading Behavior.*
- 2022 Nicole Wong, Computer Science (MIT)
- 2022 Heidi Lei, Mathematics (MIT)
- 2021 Vinh Le, Computation and Cognition (MIT)
- 2020 Robert Chen, Computer Science (MIT)
- 2020 Carl Joshua Quines, Mathematics (MIT)

Professional Service

- 2024 Founding Organizer of the Graduate Student Steering Committee of the Cognitive Science Society
- 2022 – Diversity & Inclusion Committee, Cognitive Science Society
- 2022 – Membership Committee, Cognitive Science Society
- 2022 Organizer, MIT CompLang
- 2019 Organizer, Vimeo Machine Learning seminar
- 2021 Technical Session Chair, Conference of the Cognitive Science Society
- 2020 – Diversity Ambassador, Office of Graduate Education (MIT)
- 2022 MIT Summer Research Program Mentor, Office of Graduate Education (MIT)
- 2020 Reviewer, DataKind/Data.org Inclusive Growth & Recovery Challenge
- 2017 Tutor, Resilient Coders
- 2018 Preceptor, Options Through Education (Boston College)
- 2017 Council Member, PULSE Program for Service Learning (Boston College)

Reviewing (journals): OpenMind ('21, '23)

Reviewing (conferences): CogSci ('20, '21, '23, '24)

Talks

- 2024 Brain & AI (PI: Jean Remi-King), Meta AI
- 2024 Reasoning, Attention, & Memory group (PI: Jason Weston), Meta AI
- 2023 Stanford NLP Seminar, Stanford
- 2021 How Can Findings about the Brain Improve AI Systems workshop, ICLR
- 2021 Wehbe Lab, Carnegie Mellon University
- 2021 EdinburghNLP, The University of Edinburgh
- 2021 Psycholinguistics Coffee, The University of Edinburgh

2019 Machine Learning Reading Group, Vimeo

Teaching

Graduate courses

(Spring) 2021 Teaching Assistant, Cognitive Science (MIT)
(Fall) 2020 Teaching Assistant, Computational Cognitive Science (MIT)
(Fall) 2018 Teaching Assistant, Computational Models of Cognition (Boston College)

Undergraduate courses

(Fall) 2018 Teaching Assistant, Data Mining (Boston College)
(Spring) 2019 Teaching Assistant, Algorithms (Boston College)
(Spring) 2018 Teaching Assistant, Computer Science I (Boston College)
(Spring) 2018 Teaching Assistant, Personal and Social Responsibility (Boston College)
(Fall) 2018 Teaching Assistant, Personal and Social Responsibility (Boston College)
(Fall) 2017 Teaching Assistant, Personal and Social Responsibility (Boston College)

Publications

Undergraduate and Master's Advisees are underlined

Thesis

Eisape, T. (2025). Language Comprehension, Production, and Reasoning in Humans and Neural Language Models. Massachusetts Institute of Technology.

Papers

Eisape, T., Tessler, M., Dasgupta, I., Sha, F., Steenkiste, S., & Linzen, T. (2024). A Systematic Comparison of Syllogistic Reasoning in Humans and Language Models. NAACL.

Zhou, X., Su, Z., **Eisape, T.**, Kim, H., & Sap, M. (2024). Is this the real life? Is this just fantasy? The Misleading Success of Simulating Social Interactions With LLMs. EMNLP.

Eisape, T., Gangireddy, V., Levy, R. & Kim, Y. (2022). Probing for Incremental Parse States in Autoregressive Language Models. EMNLP.

Liu, Z., **Eisape, T.**, Prud'hommeaux, E., & Hartshorne, J. (2022). Data-driven Crosslinguistic Syntactic Transfer in Second Language Learning. CogSci.

Tucker, M., **Eisape, T.**, Qian, P., Levy, R., & Shah, J. (2022). When Does Syntax Mediate Neural Language Model Performance? Evidence from Dropout Probes. NAACL.

Chen, R., Levy, R., & Eisape, T.(2021). On Factors Influencing Typing Time: Insights from a Viral Online Typing Game. CogSci/HSP.

Eisape, T., Zaslavsky, N., & Levy, R. (2020). Cloze Distillation: Improving Neural Language Models with Human Next-Word Predictions. CoNLL.

Eisape, T., Levy, R., Tenenbaum, J., & Zaslavsky, N. (2020). Toward human-like object naming in artificial neural systems. Bridging AI and Cognitive Science workshop, ICLR.

Abstracts & Preprints

Eisape, T., Merrill, W., Dietz, S., & Hartshorne, J. (2020). Grammatical Accents: Using Machine Learning to Quantify Language Transfer. CogSci/HSP.

Eisape, T., Grasso, S., Kurt, L., Lim, C., & Hartshorne, J. (2022). Replication of Conway and Christiansen (2005) Modality-Constrained Statistical Learning of Tactile, Visual, and Auditory Sequences.

Choong, H., **Eisape, T.,** ...& Hartshorne, J. (2018). Fourth Replication of Saffran, Newport, & Aslin (1996) Word segmentation: The role of distributional cues. Preprint.

Miscellaneous

2016 Captain, Boston College Varsity Men's Rowing