Tiwa Eisape

Psycholinguistics, Natural language processing, Machine learning
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Education

2019 – Massachusetts Institute of Technology
Ph.D, Cognitive Science
Advisors: Roger Levy, Yoon Kim
Committee: Joshua Tenenbaum, Edward Gibson, Jacob Andreas
GPA: 5.0/5.0

2015 – 2019 Boston College
B.S, Computer Science
Advisors: Joshua Hartshorne, Stefano Anzellotti
Major GPA: 3.9/4.0

Academic Postions

2022 – Student Representative to the Board, Cognitive Science Society

Employment

2023 Google AI, Student Researcher
Supervisor: Tal Linzen

2019 Vimeo Applied Machine Learning, Research Intern

Honors

2021 Graduate Research Fellowship (National Science Foundation)

2019 GEM Full Fellowship (InterActiveCorp/GEM Consortium)

2019 Dean of Sciences Fellowship (MIT)

2019 Presidential Fellowship (MIT)
awarded & declined

2019 Matthew R. Copithorne Scholarship (Boston College)

2016 Ronald E. Mcnair Scholarship (The Federal TRIO Programs)

2021 Walle Nauta Teaching Award (MIT)

2019 Order of the Cross and Crown (Boston College)

Talks

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

Publications

Conference Papers

Eisape, T., Gangireddy, V.^, Levy, R. & Kim, Y. (2022). Probing for Incremental Parse States in Autoregressive Language Models. *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP).*

Liu, Z., **Eisape, T.**, Prud'hommeaux, E., & Hartshorne, J. (2022). Data-driven Crosslinguistic Syntactic Transfer in Second Language Learning. In *Proceedings of the 44th Annual Meeting of the Cognitive Science Society.*

Tucker, M., **Eisape, T.**, Qian, P., Levy, R., & Shah, J. (2022). When Does Syntax Mediate Neural Language Model Performance? Evidence from Dropout Probes. In *Proceedings of the 21st Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL).*

Chen, R.^, Levy, R., & **Eisape, T.** (2021). On Factors Influencing Typing Time: Insights from a Viral Online Typing Game. In *Proceedings of the 43rd Annual Meeting of the Cognitive Science Society.*

Eisape, T., Zaslavsky, N., & Levy, R. (2020). Cloze Distillation: Improving Neural Language Models with Human Next-Word Predictions. In *Proceedings of the 24th Conference on Computational Natural Language Learning.*

Eisape, T., Levy, R., Tenenbaum, J., & Zaslavsky, N. (2020). Toward human-like object naming in artificial neural systems. *In The Bridging AI and Cognitive Science workshop at the 8th International Conference on Representation Learning.*

Abstracts & Posters

Chen, R.^, Levy, R., & **Eisape, T.** (2021). The Effect of Context on Typing Time: Evidence from 100,000 TypeRacers. In *Proceedings of the 34th Annual CUNY Conference on Human Sentence Processing.*

Eisape, T., Merrill, W., Dietz, S., & Hartshorne, J. (2020). Grammatical Accents: Using Machine Learning to Quantify Language Transfer. In *Proceedings of the 33rd Annual CUNY Conference on Human Sentence Processing*.

Eisape, T., Merrill, W., Dietz, S., & Hartshorne, J. (2018). Grammatical Accents: Using Machine Learning to Quantify Language Transfer. In *Proceedings of the 43rd Annual Meeting of the Cognitive Science Society*.

Preprints

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

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

^ *denotes undergraduate students mentored*

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)

Organizing

Conferences

2021 Technical Session Chair, Conference of the Cognitive Science Society

Speaker Series/Reading Groups

2022 CompLang, MIT
2019 Machine learning reading group, Vimeo

Research Assistants

2022 - Vineet Gangireddy, Applied Mathematics (Harvard)
2022 - Jesus Crespo, Computation and Cognition (MIT)
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

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)

Misc.

2016 Captain, Boston College Varsity Men's Rowing