Qing Yao

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Education

The University of Texas at Austin 08/2024 – Present
Ph.D. in Linguistics Austin, TX
Advisor: Kyle Mahowald

University of California, Santa Barbara 09/2020 – 03/2024
B.S. with Highest Honors, Mathematics, College of Creative Studies Santa Barbara, CA
Advisors: Sui Tang (Mathematics), Simon Todd (Linguistics)

Experience

Meta, FAIR Alignment 05/2026 – 08/2026
Research Scientist Intern (Part Time Student Researcher until 12/2026) New York City, NY
Host: Adina Williams

Publications

8. **Q. Yao**, S. Boguraev, T. Pimentel, K. Mahowald. The Emergence and Sparsification of a Syntactic Circuit. In EMNLP (Main, Oral), 2026.
7. K. Mo, T. Yang, C. Shaib, **Q. Yao**, W. Rudman, R. Kouzy, K. Misra, B. Wallace, J. Li. What's in a Name? Morphological Shortcuts by LLMs in Pharmacology. In EMNLP (Main), 2026.
6. D. Sutter*, **Q. Yao***, S. Boguraev*, J. Minder, A. Di Maio, T. Hofmann, K. Mahowald, T. Pimentel. Parasite Features: Causal Abstraction Through Spurious Pathways. In NeuRIPS, 2026
5. S. Boguraev*, **Q. Yao***, K. Mahowald. 2026. France or Spain or Germany or France: A Neural Account of Non-Redundant Redundant Disjunctions. In Proceedings of the Annual Meeting of the Cognitive Science Society, Volume 48, 2026.
4. **Q. Yao**, K. Misra, L. Weissweiler, K. Mahowald. Both Direct and Indirect Evidence Contribute to Dative Alternation Preferences in Language Models. In *Second Conference on Language Modeling (COLM)*, 2025.
3. L. Huang, D. Li, S. Tang, **Q. Yao**. Random Space-Time Sampling and Reconstruction of Sparse Bandlimited Graph Diffusion Field. *Journal of Fourier Analysis and Applications*, 2025.
2. **Q. Yao**, S. Todd. BERT's Insights Into the English Dative and Genitive Alternations. In *Proceedings of the Society for Computation in Linguistics (SCiL)*, 2024.
1. **Q. Yao**, L. Huang, S. Tang. Space-Time Variable Density Samplings for Sparse Bandlimited Graph Signals Driven by Diffusion Operators. In *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. 2023.

Invited Talks

3. *Learning Syntax from Scratch: Circuit Emergence, Sparsification, and Pre-pretraining.*
Computational Linguistics Seminar at the Institute for Logic, Language and Computation (ILLC), the University of Amsterdam. 10/2026
2. *Both Direct and Indirect Evidence Contribute to Dative Alternation Preferences in Language Models* (Invited Talk).
LLMs and the Brain Conference, Rice University. 09/2025

1. *Graph Signal Sampling and Recovery via Compressed Sensing.*
   Research and Creative Activities Conference, UCSB College of Creative Studies. 11/2022

Awards

UT Austin	**Donald D. Harrington Graduate Fellowship**	2024
UCSB	**Top senior paper in linguistics**	2024
	Undergraduate Research and Creative Activities Grant ($400)	2023
	CCS Traveling Undergraduate Research Fellowship ($2000 for ICASSP)	2023
	CCS Summer Undergraduate Research Fellowship ($4000)	2022

Teaching Experience

UCSB	**Reader** for MATH CS 121 – Probability. Winter 2023
	Reader for MATH 8 – Transition to Higher Mathematics. Fall, Winter 2022

Service

- **Reviewing** ACL ARR 2026, CogSci 2026, ICASSP 2024
- **Organizing Committee** for the Annual Meeting of Texas Linguistics Society 2026
- **Faculty Hiring Committee** for UT Linguistics 2025