# Sasha Boguraev

Ph.D. Student at UT Austin

Department of Linguistics
The University of Texas at Austin

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SashaBoguraev

#### Education

2024 - Now Ph.D in Computational Linguistics, Minor in Computer Science,

The University of Texas at Austin, Austin, TX

Advisor: Prof. Kyle Mahowald, Focus: Mechanistic Interpretability, Psycholinguistics.

2020 – 2024 B.A in Computer Science, Mathematics, Computational Cognitive Science, Cornell University College of Arts and Sciences, Ithaca, NY

# Publications

Summa Cum Laude Honors

EMNLP '25 **Sasha Boguraev**, Christopher Potts, Kyle Mahowald. Causal Interventions Reveal Shared Structure Across English Filler-Gap Constructions.

In Proceedings of Empirical Methods of Natural Language Processing, 2025.

CogSci '25 **Sasha Boguraev**, Katrin E. Erk, Kyle Mahowald, James Shearer, & Steve M. Wechsler. Reinforcement learning produces efficient case-marking systems. In *Proceedings of the Annual Meeting of the Cognitive Science Society, 47, 2025.* 

Workshop @ **Sasha Boguraev**, Ben Lipkin, Leonie Weissweiler, Kyle Mahowald. Models Can NeurIPS '24. and Should Embrace the Communicative Nature of Human-Generated Math. *4<sup>th</sup> MATH-AI Workshop at NeurIPS*, 2024.

For full list of publications (including those unrelated to Comp. Ling.) see Google Scholar

### Undergraduate Honors Thesis

"What Do You Mean By That?" – Idiolects, Casual Miscommunication, and the Evolutionary Fitness of Languages

Supervisors Prof. Morten Christiansen (Chair), Prof. Veit Elser, and Prof. Eugene Vinitsky (NYU)

Description Simulated idiolect development in populations of agents using Multi-Agent Reinforcement Learning. Found idiolects shape languages to be robust to external communication failures.

#### Industry Experience

Summer 2023 Summer Undergraduate Research Fellow, NASA,

Jet Propulsion Laboratory (JPL), La Cañada Flintridge, California

- O Prototyping Information Retrieval and Retrieval-Augmented Generation (RAG) systems
- O Received return offer for Spring 2024

#### Service

- 2025 Reviewer for INTERPLAY Workshop at Conference of Language Modeling (COLM)
- 2025 Graduate Student Representative; Search Committee for Assistant Professor in Computational Linguistics. Department of Linguistics, UT Austin.

## Teaching Experience

#### Cornell University

CS 4740 Natural Language Processing, Undergraduate Teaching Assistant, Fall 2023 Instructor: Prof. Lillian Lee

## Awards and Fellowships

- Spring 2024 Cornell Arts and Sciences Extraordinary Senior
  - Fall 2023 Cornell Computer Science Course Staff Exceptional Service Award
- Summer 2023 California Institute of Technology Summer Undergraduate Research Fellowship
  - Fall 2021 Robert S. Harrison College Scholar