

Julie Kallini Ph.D. Student | NLP | Computational Linquistics

juliekallini.com



kallini@stanford.edu



juliekallini

jkallini

About Me -

I am a first-year Computer Science Ph.D. student at Stanford University, where I am a member of the Natural Language Processing Group. Previously, I worked for nearly two years as a software engineer at Meta, where I used machine learning for privacy problems in advertisements. Before joining Meta, I graduated from Princeton University, where I was fortunate to conduct computational linguistics research. I am originally from Los Angeles, California.

Research Interests —

My work lies at the intersection of NLP, machine learning (ML) interpretability, and linguistics, with the goal of understanding what deep learning and large language models reveal about linguistics and language acquisition. I am particularly interested in linguistic variation and diversity, and how models learn patterns across various languages differently.

Education

2023—Pres Ph.D. in Computer Science

Advisor: Christopher Potts

• Funding: NSF Graduate Research Fellowship, Stanford School of Engineering Graduate Fellowship, Stanford EDGE Fellowship

2017—2021 **B.S.E.** in Computer Science, Minor in Linguistics

• Graduated with highest honors (summa cum laude)

Advisor: Christiane Fellbaum

Papers

[1] Julie Kallini, Isabel Papadimitriou, Richard Futrell, Kyle Mahowald, and Christopher Potts. Mission: Impossible Language Models, 2024.

- [2] Julie Kallini and Christiane Fellbaum. What to Make of make? Sense Distinctions for Light Verbs. In Global WordNet Conference 2023, Donostia-San Sebastian, Spain, January 2023. Global WordNet Association.
- [3] Julie Kallini and Christiane Fellbaum. Computational Approaches for Understanding Semantic Constraints on Two-termed Coordination Structures. In Text, Speech, and Dialogue, pages 64–76, Cham, 2022. Springer International Publishing.
- [4] Julie Kallini and Christiane Fellbaum. A Corpus-based Syntactic Analysis of Two-termed Unlike Coordination. In Findings of the Association for Computational Linguistics: EMNLP 2021, pages 3998-4008, Punta Cana, Dominican Republic, November 2021. Association for Computational Linguistics.

Teaching Experience

Instructor, Applied Machine Learning 2022-Pres Uplimit (formerly CoRise)

Created projects; taught ML concepts at lectures and office hours.

2021 **Head TA**, Machine Translation **Princeton University**

Designed coding exercises and lead weekly classes on NLP topics.

2020 **TA**, Computer Networks **Princeton University**

Taught course material and facilitated discussions in weekly classes.

2018-2019 **Lead Grader/CA**, Algorithms and Data Structures **Princeton University**

Compiled assignment rubrics; trained and supervised other graders.

Industry Experience

2021-2023 **Software Engineer.** Machine Learning for Ads Privacy

Stanford University

Princeton University

Built classifiers to detect sensitive topics in media on the Meta family of apps.

2020 **Software Engineer Intern**, Community Integrity

Designed data analysis tools for content in the human review system.

2019 Software Engineer Intern, Android Development

Created an Android app that organizes and streamlines office hours queues.

Volunteering and Outreach

2022-Pres **AI Mentor** Break Through Tech AI

Mentored students from underrepresented backgrounds to pursue careers in data science, ML, and AI, including job application and interview prep.

2021-Pres **Alumni Interview Volunteer** Princeton University Admissions

Conducted interviews with high school students applying to Princeton.

Awards and Honors

2021	Phi Beta Kappa	Princeton University
2021	Phillip Goldman '86 Senior Prize (Top CS Academic Prize)	Princeton University
2021	Outstanding CS Senior Thesis Prize	Princeton University
2021	Outstanding Student Teaching Award	Princeton University
2019	Tau Beta Pi (Engineering Honor Society)	Princeton University