Lucy Li

language models, computational social science, responsible AI

lucy3li@cs.washington.edu | lucy3.github.io | Google Scholar

Current Position

University of Wisconsin-Madison *Madison, WI*

Assistant Professor *Starting August 2026*

- Department of Computer Sciences
- Information School (affiliated)

Education

University of California, Berkeley *Berkeley, CA*

PhD Information Science *Aug 2019 - July 2025*

- Advisor: David Bamman
- Committee members: Isaac Bleaman, Niloufar Salehi, Dan Jurafsky
- Berkeley AI Research (BAIR), Stanford SPARQ Research Affiliate

Stanford University *Stanford, CA*

MS Computer Science, BS Symbolic Systems *Sept 2014 - June 2019*

- Coterminal degrees, w/ a concentration in language and depth in artificial intelligence.

Former Positions

Allen Institute for Artificial Intelligence *Seattle, WA*

Contractor *May 2026 - Present*

- Mentee: Kajal Patel

University of Washington *Seattle, WA*

Postdoctoral Researcher *August 2025 - July 2026*

- Paul G. Allen School of Computer Science and Engineering
- Advisors: Yulia Tsvetkov, Noah Smith

Allen Institute for Artificial Intelligence *Seattle, WA*

Contractor *Aug 2025 - Dec 2025*

- Mentor: Kyle Lo (AI for Education)

Allen Institute for Artificial Intelligence *Seattle, WA*

Research Intern *June 2023 - Aug 2024*

- Mentors: Jesse Dodge (AllenNLP, June 2023 - Dec 2023), Kyle Lo (AI for Education, Jan 2024 - Aug 2024)

Allen Institute for Artificial Intelligence *Seattle, WA*

Research Intern *May 2022 - Dec 2022*

- Mentors: Katie Keith (Semantic Scholar team), Jesse Dodge (AllenNLP team)

Microsoft Research *Montreal, Canada*
Research Intern *May 2021 - Aug 2021*

- Mentors: Alexandra Olteanu, Su Lin Blodgett (Fairness, Accountability, Transparency & Ethics in AI team)

Stanford Computer Science *Stanford, CA*
Research Assistant *Jan 2019 – Dec 2019*

- Advisors: Dora Demszky, Dan Jurafsky (Stanford NLP), Patricia Bromley (School of Education)

École Polytechnique Fédérale de Lausanne *Lausanne, Switzerland*
Research Intern *July 2018 – Sept 2018*

- Advisor: Tiziano Piccardi, Robert West (Data Science Lab)

Stanford Computer Science *Stanford, CA*
Research Assistant *April 2017 – June 2018*

- Advisors: David Jurgens, Jure Leskovec (Stanford Network Analysis Project), Dan Jurafsky (Stanford NLP)

Papers

*indicates equal contribution.

Note on disciplinary audiences: *ACL*, *EMNLP*, *NAACL*, and *TACL* are natural language processing venues, *Journal of Cultural Analytics* and *CHR* are computational humanities venues, and *AERA Open* and *Educational Researcher* are education journals.

Journals & Conferences

Aruna Srivastava, Orevaoghene Ahia, **Li Lucy**, Ashley Christendat, Sameep Chattopadhyay, Samir Farhan, Tejumade Afonja, Valentin Hofmann, Sachin Kumar, Noah A. Smith, Yulia Tsvetkov. The Cost of Sounding Different: Accent Bias in Audio Language Models. *Empirical Methods in Natural Language Processing (EMNLP)*, 2026.

Li Lucy, Camilla Griffiths, Sarah Levine, Jennifer L Eberhardt, Dorottya Demszky, David Bamman. Tell, Don't Show: Leveraging Language Models' Abstractive Retellings to Model Literary Themes. *Findings of the Association of Computational Linguistics (ACL)*, 2025.

Sami Baral*, **Li Lucy***, Ryan Knight, Alice Ng, Luca Soldaini, Neil Heffernan, Kyle Lo. DrawEduMath: An Expert-Annotated Dataset of Students' Math Images. *North American Association for Computational Linguistics (NAACL)*, 2025. [Outstanding Paper Award]

Li Lucy, Camilla Griffiths, Claire Ying, JJ Kim-Ebio, Sabrina Baur, Sarah Levine, Jennifer Eberhardt, David Bamman, Dora Demszky. Racial and Ethnic Representation in Literature Taught in US High Schools. *Journal of Cultural Analytics*, 2025.

Minju Choi*, **Li Lucy***, Patricia Bromley, David Bamman. "Othering" through War: Depiction of Asians/Asian Americans in U.S. History Textbooks from California and Texas. *Educational Researcher*, 2025.

David Bamman, Kent K. Chang, **Li Lucy**, Naitian Zhou. On Classification with Large Language Models in Cultural Analytics. *Computational Humanities Research (CHR) Conference*, 2024.

Li Lucy, Tal August, Rose E. Wang, Luca Soldaini, Courtney Allison, Kyle Lo. Evaluating Language Model Math Reasoning via Grounding in Educational Curricula. *Findings of Empirical Methods in Natural Language Processing (EMNLP)*, 2024.

Li Lucy, Suchin Gururangan, Luca Soldaini, Emma Strubell, David Bamman, Lauren Klein, Jesse Dodge. AboutMe: Using Self-Descriptions in Webpages to Document the Effects of English Pretraining Data Filters. *Association of Computational Linguistics (ACL)*, 2024.

Luca Soldaini, Rodney Kinney, Akshita Bhagia, Dustin Schwenk, David Atkinson, Russell Authur, Ben Bogin, Khyathi Chandu, Jennifer Dumas, Yanai Elazar, Valentin Hofmann, Ananya Harsh Jha, Sachin Kumar, **Li Lucy**, Xinxi Lyu, Nathan Lambert, Ian Magnusson, Jacob Morrison, Niklas Muennighoff, Aakanksha Naik, Crystal Nam, Matthew E. Peters, Abhilasha Ravichander, Kyle Richardson, Zejiang Shen, Emma Strubell, Nishant Subramani, Oyvind Tafjord, Pete Walsh, Luke Zettlemoyer, Noah A. Smith, Hannaneh Hajishirzi, Iz Beltagy, Dirk Groeneveld, Jesse Dodge, Kyle Lo. Dolma: an Open Corpus of Three Trillion Tokens for Language Model Pretraining Research. *Association of Computational Linguistics (ACL)*, 2024. [Best Resource Paper]

Li Lucy, Su Lin Blodgett, Milad Shokouhi, Hanna Wallach, Alexandra Olteanu. "One-Size-Fits-All"? Examining Expectations around What Constitute "Fair" or "Good" NLG System Behaviors. *North American Association for Computational Linguistics (NAACL)*, 2024.

Li Lucy, Jesse Dodge, David Bamman, Katherine A. Keith. Words as Gatekeepers: Measuring Discipline-specific Terms and Meanings in Scholarly Publications. *Findings of the Association of Computational Linguistics (ACL)*, 2023.

Li Lucy, Divya Tadimeti, David Bamman. Discovering Differences in the Representation of People using Contextualized Semantic Axes. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2022

Li Lucy, David Bamman. Characterizing English variation across social media communities with BERT. *Transactions of the Association of Computational Linguistics (TACL)*, 2021.

Li Lucy*, Dora Demszky*, Patricia Bromley, Dan Jurafsky. Content Analysis of Textbooks via Natural Language Processing: Findings on Gender, Race, and Ethnicity in Texas U.S. History Textbooks. *AERA Open*, 2020. [Best Paper Award at American Educational Research Association (AERA) Educational Data Science Conference.]

Workshops & Non-Archival Venues

Li Lucy, Albert Zhang, Nathan Anderson, Ryan Knight, Kyle Lo. The Aftermath of DrawEduMath: Vision Language Models Underperform with Struggling Students and Misdiagnose Errors. *Workshop on Innovative Use of NLP for Building Educational Applications (BEA) at ACL, 2026.*

Sami Baral*, **Li Lucy***, Ryan Knight, Alice Ng, Luca Soldaini, Neil Heffernan, Kyle Lo. DrawEduMath: An Expert-Annotated Dataset of Students' Math Images. *NeurIPS Workshop on Mathematical Reasoning and AI*, 2024. [non-archival]

Li Lucy, David Bamman. Gender and Representation Bias in GPT-3 Generated Stories. *Workshop on Narrative Understanding (WNU) at NAACL*, 2021.

Emma Lurie, **Li Lucy**, Masha Belyi, Sofia Dewar, Daniel Rincón, John Baldwin, Rajvardhan Oak. Investigating Causal Effects of Instructions in Crowdsourced Claim Matching. *Computation + Journalism Symposium (C+J)*, 2020. [non-archival]

Li Lucy, Julia Mendelsohn. Using sentiment induction to understand variation in gendered online communities. *Society for Computation in Linguistics (SCiL)*, 2019.

Li Lucy, Jon Gauthier. Are distributional representations ready for the real world? Evaluating word vectors for grounded perceptual meaning. *Language Grounding for Robotics (RoboNLP) Workshop at the Association for Computational Linguistics (ACL)*, 2017.

Blog Posts

Maria Antoniak, **Li Lucy**, Maarten Sap, Luca Soldaini. Using Large Language Models With Care. 2023. [Link.]

David Jurgens, **Li Lucy**. A Look inside the Pedagogy of Natural Language Processing. 2018. [Link.]

Honors & Awards

Outstanding Area Chair, EMNLP *2025*
Tinker Research Grant, $5k compute credits *2025*
Multilingual Evaluation Grant, from Google, $100k (PIs: Noah Smith, Yulia Tsvetkov) *2025*
Outstanding Paper, for DrawEduMath, at NAACL *2025*
Best Resource Paper, for Dolma, at ACL *2024*
Learning Engineering Tools Competition Catalyst Award, $50k, The Learning Agency *2024*
Rising Star in Data Science, University of Chicago & University of California, San Diego *2023*
Rising Star in EECS, Rising Stars Academic Career Workshop *2023*
Meta Research PhD Fellowship Finalist, Meta *2023*
AI2 Outstanding Intern of the Year Award, Allen Institute for Artificial Intelligence *2022*
Human-Centered Artificial Intelligence Seed Grant, Stanford HAI (PI: Patricia Bromley) *2021*
Google PhD Fellowship Nominee, one of four students selected by UC Berkeley *2021*
Best Paper Award, Conference on Educational Data Science *2020*
Graduate Research Fellowship, National Science Foundation *2019*
Top 5% of Course Assistants, Stanford Computer Science *2019*
K. Jon Barwise Award for Distinguished Contributions, Stanford Symbolic Systems *2018*
Undergraduate Advising & Research (UAR) Small Grant, $1500, Stanford University *2018*
Grants for Education and Research, $1145, Stanford Symbolic Systems *2017*
Phi Beta Kappa, Stanford University *2017*

Invited Talks

Diaries of Educational Data Research
July 2026. Keynote, NLP+CSS Workshop at ACL.

"General-Purpose" Language Models: From Pretraining to Application
Feb 2026. Linguistics Colloquium, University of Washington.

Modeling Language as Social and Cultural Data
Nov 2025. Guest Lecture, Northeastern University.

Building Benchmarks for K-12 Math with In-Domain Experts
Aug 2025. Cognitive Tools Lab, Psychology Department, Stanford University.

Asian American Voices in Education: Examining U.S. history textbooks from California and Texas
May 2025. Asian Staff Forum & Filipino American Community, Stanford University.

Language Models for People and Culture – From Pretraining to Application
April 2025. School of Information, University of Illinois Urbana-Champaign.

Large-Scale Language Patterns Across Social Groups
Sept 2024. "Next 10 in AI" talk series, Max Planck Institute for Software Systems.
Oct 2023. USC NLP Group, University of Southern California.

AboutMe: Using Self-Descriptions in Webpages to Document the Effects of English Pretraining Data Filters
Sept 2024. NLP Group, University of Massachusetts, Amherst.
July 2024. MilaNLP Seminar Series, Bocconi University.
March 2024. Computing and Society Seminar, Stanford University.
Feb 2024. Computational Linguistics group, University of Toronto.

Measuring Depictions and Expressions of Social Groups with NLP
Jan 2024. Jantina Tammes School of Digital Society, Technology and AI. University of Groningen, Netherlands.
May 2023. NLP Seminar, Stanford University.

Reader Response to Characters of Color in Literature Taught in U.S. Schools
Jan 2024. Center for Interdisciplinary Research. Bielefeld University, Germany.

Words as Gatekeepers: Measuring Discipline-specific Terms and Meanings in Scholarly Publications
Nov 2023. New Directions in Analyzing Text as Data (TADA). Amherst, MA.
June 2023. Computational Culture Lab, Stanford Graduate School of Business & Berkeley Haas.

"One-size-fits-all"? Observations and Expectations of NLG Systems across Identity-related Language Features.
Aug 2023. AI, Ethics and Effects in Engineering and Research (Aether), Microsoft.

Context-Dependent Depictions of People Across Three Domains.
March 2023. "NLP for Social Science: From Language Models to Social Structures" talk series, Columbia University.

What big data and big models bring to the table.
February 2023. "Roundtable Series: Learning How to Play with the Machines," University of California, Berkeley.

Characterizing English variation across social media communities with BERT.
Oct 2022. Guest lecture for "Practical Approaches to Data Science with Text" course, Emory University.
June 2021. Guest lecture for "Computational Text Analysis" course, Barnard College.
Nov 2021. Guest lecture for "Practical Approaches to Data Science with Text" course, Emory University.

Content Analysis of Textbooks via Natural Language Processing.
Sept 2022. Narrative and Society Conference, Department of English, McGill University.
Oct 2021. 103rd Anniversary of the School of Information, Berkeley.
Feb 2021. Guest lecture for "Doing Digital History" course, Stanford University.
Feb 2021. Human-Computer Interaction Lunch Seminar, Stanford University.
May 2021. Guest lecture for "Using Data to Describe the World" course, Stanford University.
May 2020. Guest lecture for "Using Data to Describe the World" course, Stanford University.
Oct 2019. New Directions in Analyzing Text as Data (TADA). Stanford, CA.

Teaching and Mentoring Experience

Berkeley INFO 159/259, Natural Language Processing, Graduate Student Instructor *Spring 2025*
Stanford CS 224U, Natural Language Understanding, Course Assistant (top 5% in CS) *Spring 2019*
Symbolic Systems Program, Advising Fellow *2016 - 2017, 2019*
Stanford EE/CME 103, Introduction to Matrix Methods, Course Assistant *Fall 2017*

Undergraduate advisees: Sophia Li (University of Washington Computer Science, 2026-Present), Aruna Srivastava (University of Washington Computer Science, 2025-Present), Dani Roytburg (Emory Computer Science & Quantitative Sciences, 2024 → CMU MS), Hadley Schachter (UC Berkeley Computer Science & Linguistics, 2024), Claire Ying Wang (UC Berkeley Data Science & Media Studies, 2022-2024 → UIUC PhD), JJ Kim-Ebio (UC Berkeley Data Science, 2022-2024), Iris Wu (Emory Women, Gender, and Sexualities Studies & Quantitative Sciences, 2024), Odelia Larbi-Amoah (Emory Women, Gender, and Sexualities Studies & Quantitative Sciences, 2023-2024), Ethan N. Elasky (UC Berkeley Data Science, 2023-2024), Carolyn Wang (UC Berkeley Computer Science, 2023-2024), Sabrina Baur (UC Berkeley Cognitive Science, 2023 → Deloitte), Tiffany Liang (UC Berkeley Data Science, 2023 → Kohl's), Aryia Dattamajumdar (UC Berkeley Computer Science, 2023 → Meta), Sebastian Orozco (UC Berkeley Ethnic Studies & Political Science, 2022), Divya Tadimeti (UC Berkeley Computer Science, 2021-2022 → Columbia MS), Nikhil Mandava (UC Berkeley Computer Science & Business, 2021 → Glean).

Master's student advisees: Vyoma Raman (Stanford Computer Science, 2023-2025).

Service

Professional

Senior Area Chair: ACL Rolling Review (2026).

Area Chair: ACL Rolling Review (2025).

Reviewer: ACL Rolling Review (2021-Present), ACL (2021-Present), EMNLP (2021-Present), FAccT (2024-Present), Computational Humanities Research (2024-Present), Sociological Methods and Research (2025), Patterns (2025), ICLR (2025), ACL Student Research Workshop (2024), NLP+Computational Social Science Workshop (2024), Workshop on Reference, Framing, and Perspective (2024), Journal of Big Data (2024), PLOS One (2024), LREC (2024), NeurIPS (2023-2024), AI & HCI Workshop at ICML (2023), The Web Conference (2023), NLP for Positive Impact Workshop (2022), COLING (2022), NAACL Student Research Workshop (2022), NAACL Workshop on Understanding Implicit and Underspecified Language (2022), SCiL (2022), CHI (2022), CSCW (2022), ACL Workshop on NLP for Positive Impact (2021), AERA Open (2020), NeurIPS Human and Machine in-the-Loop Evaluation and Learning Strategies Workshop (2020).

Organizing: Computational Humanities Research (2025), Teaching NLP NAACL Workshop (2021).

Advisory board: AI for Humanists (2020-Present), UC Berkeley Human Rights Center's Assessment of Large Language Models (2023-Present).

Community

General: Diaries of Social Data Research (Podcast Host, 2021-Present), Sociologists of Digital Things (Admin, 2021), NLP+CSS PhD Summer Reading Group (2020).

Students: Black in AI's Emerging Leaders in AI Grad Prep Program (Speaker; 2025), Berkeley Undergraduate Research Apprentice Program (2021-2025), BAIR Mentoring Program (2020-2021), CS Kickstart (Speaker; 2020), UC Berkeley Girls in Engineering (Leader; 2020), Berkeley AI4ALL (Mentor; 2019), Stanford AI4All (Mentor; 2019), Girls Teaching Girls to Code (Mentor/Lead; 2018, 2019).