# Lucy Li

Research interests: natural language processing (NLP) & computational social science.

#### Education

#### University of California, Berkeley

PhD. School of Information.

Aug 2019 - Present

• Advisor: David Bamman.

## Stanford University

MS. Computer Science. Depth area in Artificial Intelligence.

Sept 2017 – June 2019

BS. Symbolic Systems with distinction. Concentration in Natural Language.

Sept 2014 – June 2018

• Study abroad at University of Oxford, Winter 2017.

## Peer-reviewed Papers

\* indicates equal contribution

- Li Lucy\*, Dora Demszky\*, Patricia Bromley, and Dan Jurafsky. Content Analysis of Textbooks via Natural Language Processing: Novel Findings on Gender, Race, and Ethnicity in Texas U.S. History Textbooks. AERA Open, 2020. [Conditionally accepted. Finalist for best paper award at American Educational Research Association (AERA) Educational Data Science Conference.]
- Emma Lurie, Li Lucy, Masha Belyi, Sofia Dewar, Daniel Rincón, John Baldwin, and Rajvardhan Oak. Investigating Causal Effects of Instructions in Crowdsourced Claim Matching. Computation + Journalism Symposium (C+J), 2020. [non-archival.]
- 3. **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.

#### **Presentations**

Content Analysis of Textbooks via Natural Language Processing. Guest lecture for graduate course, "Using Data to Describe the World." Stanford, CA. May 2020.

Content Analysis of Textbooks via Natural Language Processing. Text as Data (TADA). Stanford, CA. Oct 2019.

# **Grants & Awards**

National Science Foundation Graduate Research Fellowships Program.

K. Jon Barwise Award for Distinguished Contributions to the Symbolic Systems Program.

Stanford Undergraduate Advising & Research (UAR) Small Grant. \$1,500.

Symbolic Systems Grants for Education and Research (GEAR). \$1,145.

Phi Beta Kappa, elected as junior.

April 2019

May - June 2018

Aug 2017

May 2017

#### Experience

Stanford Computer Science | Research Assistant | Stanford, CA

Jan 2018 - Dec 2019

- Advised by Dan Jurafsky and Patricia Bromley, in collaboration with PhD student Dora Demszky.
- Investigated the framing and representation of underrepresented groups in history textbooks with linguistics.

École Polytechnique Fédérale de Lausanne | Research Intern | Lausanne, Switzerland

July 2018 - Sept 2018

- Advised by Robert West in the Data Science Lab at Summer@EPFL, an international research program.
- Operationalized and analyzed behavioral trends in a political quote dataset using Apache Spark, emotion lexicons, Stanford CoreNLP parsers, and social networks.

## Stanford Computer Science | Research Assistant | Stanford, CA

April 2017 – June 2018

- Advised by David Jurgens in the Stanford Network Analysis Project (PI: Jure Leskovec) and NLP group (PI: Dan Jurafsky).
- Used language and social network features to classify fictional and real relationships with scikit-learn, NLTK, and Keras.

# **Teaching & Advising**

## Stanford CS 224U: Natural Language Understanding | Course Assistant

April 2019 – June 2019

Awarded a bonus for being in the top 5% of course assistants in computer science for a course taught by Chris
Potts and Bill MacCartney.

## Stanford Symbolic Systems Program | Advising Fellow

Sept 2016 - June 2017, Jan 2019 - June 2019

- Acted as the liaison between the program's administration and 140+ students.
- Advised prospective and current students for a total of four academic quarters.

## Stanford EE/CME 103: Introduction to Matrix Methods | Course Assistant

Sept 2017 - Dec 2017

• Received position student evaluations for an applied linear algebra course taught by Stephen Boyd and David Tse.

#### Service

Berkeley AI4ALL | Project Developer & TA
Stanford AI4ALL | Research Mentor
Girls Teaching Girls to Code | NLP Track Mentor, Lead

Aug 2019 June 2019 – July 2019 April 2018, April 2019

## **Skills**

Computer Languages: Python, Julia, C++, SQL

Natural Languages: English, Mandarin Chinese, French.

**Tools**: NLTK, Stanford CoreNLP, SpaCy, scikit-learn, Apache Spark, MTurk, Figure Eight, Keras, TensorFlow, PvTorch.