

Jeremiah Lev Milbauer

jeremiah.milbauer.info

key: [qualifications](#), [experiences](#), [work product](#), [personal](#)

Education

- Carnegie Mellon School of Computer Science, Pittsburgh PA** 2020 –
MS, Language Technologies
• Advisor: Emma Strubell
- University of Chicago, Chicago IL** 2015 – 2019
BS Computer Science (hons.) and BA Philosophy, with *general honors*.
• Mock Trial Team (Captain), Dorm Council (President), Guild of Carillonists 🛎️🎵
- Hunter College High School, New York NY** 2009 – 2015
High School Diploma, grade 7-12
• Mock Trial Team (Captain), Varsity Soccer, Theater

Research and Industry Experience

- Language Technologies Institute, Carnegie Mellon University**
Graduate Research Assistant, Professor Emma Strubell. 2020.09 –
• *Designing structurally-motivated methods for efficient natural language processing, representation, and reasoning in expert domains.*
- Knowledge Lab, University of Chicago**
Affiliate. 2020.09 –
Research Fellow, Professor James Evans. 2020.01 – 2020.09
• *Developed natural language processing methods for understanding the structure of concepts in social domains. Supervised a research assistant.*
- Simmer (FKA Foodie)**
Head of Machine Learning. 2018.09 – 2019.05
• *Led work on the core ML pipeline (data cleaning, named entity recognition, and sentiment analysis), and built a new data analysis product. Accepted into YCombinator W2019.*
- Department of Computer Science, University of Chicago**
Research Assistant, Professor John Goldsmith. 2019.01 – 2019.05.
Summer Research Assistant, Professor John Lafferty. 2016.06 – 2016.09
• *Assisted Prof. Lafferty with work on topic modeling for scientific literature by building a labeling pipeline from wikipedia data. Assisted Prof. Goldsmith with unsupervised morphology.*
- Waymo, Google X**
Software Engineer Intern. 2018.06 – 2018.09
• *Developed internal tools for scheduling fleet maintenance to optimize uptime; contributed to work on intelligent mapping.*
- Berkman-Klein Center for Internet & Society, Harvard University**
Research Assistant Intern, Student Privacy Initiative. 2015.06 – 2015.08
• *Wrote articles and assisted with research in EdTech, privacy, and internet of things. Advised the MIT Media Lab's "Lifelong Kindergarten" team.*

Publications and Preprints

“Diversification vs. Specialization: A Study of Social Coding in Python and Java”

Yutao Chen, Jeremiah Milbauer, James Evans. *In submission, CSCW 2022.*

“Elite Reddit Users Curate Conflict to Drive Division”

Adarsh Mathew, Jeremiah Milbauer, James Evans. *In preparation, ASR.*

“Aligning Multidimensional Worldviews and Discovering Ideological Differences”

Jeremiah Milbauer, Adarsh Mathew, James Evans. In *EMNLP 2021* (main).

“Opting Out: Ignorance, Not Consent”

Jeremiah Milbauer. In “*Student Privacy: The Next Frontier*”, *Berkman Center Research Publications*, 2015.

Posters and Presentations

“Networked Influence and Contribution on Reddit”

Adarsh Mathew, Jeremiah Milbauer, James Evans. *INDE 2021* (workshop oral)

“Representing Repositories in the Open Source Ecosystem”

Jeremiah Milbauer, Yutao Chen, Deblina Mukherjee, James Evans. *IC2S2 2021* (poster)

Some Works in Progress

“Distilled Evidence Trees for Efficient QA”

Jeremiah Milbauer, Emma Strubell. jeremiah.milbauer.info/evidence.pdf

“Continuous Speaker Shifting for Obviously Anonymized Speech”

Course project for “Introduction to Deep Learning.” jeremiah.milbauer.info/cocktail.pdf

“Measuring Consensus with Linguistic Self-Similarity”

Course project for “Tracking Political Sentiment.” jeremiah.milbauer.info/consensus.pdf

Other Projects

Exercism Research Team

exercism.org

- Contributed to research projects on the learn-to-code platform. Led work on AST-based analysis of “idiomatic” clusters for solutions to programming puzzles.

Green Homesteads

jeremiah.milbauer.info/homesteads.html

- An essay on responding to climate change with a “Green Homesteading” program, which would subsidize innovative green-energy farms, shift the narrative surrounding green technology, and provide a platform to address historic land inequities.

Mentorship and Service

@ Carnegie Mellon University

SCS Masters Advisory Committee, Chairperson and Liaison to the Dean

@ UChicago

Undergraduate Thesis Co-adviser, Deblina Mukherjee (Sociology & Statistics)

Committee for a Cognitive Science Major, member

Committee for a Science Communication Workshop, member

Dorm Council, President

Mock Trial Team, Coach, Tournament Judge

Guild of Carillonists, Tour Guide and Teacher

Honors and Awards

2020-2022 CMU Research Fellowship (Tuition + stipend)

2020 Micro-Metcalf Research Grant (\$2000), University of Chicago

2019 Open Future Essay Competition, Shortlist Finalist (top 0.25%), The Economist

2019 YCombinator Winter 2019

2015-2019 Various Mock Trial Awards (4 individual, 15+ team awards)

2016 National Merit Scholarship (\$16,000)

Skills and Interests

Programming: Python, Haskell, Java, C, C++, bash, html/css, pytorch, keras, gensim, etc.

Topic areas: Machine learning, natural language processing, representation learning, computational social science

Other: Curriculum development, law & technology, AI ethics, philosophy of CS

Fun: electronic music, fabrication, theater, soccer, piano, carillon, cooking, canoeing, computational art, simulations

Academic References

Emma Strubell

Assistant Professor, Language Technologies Institute, Carnegie Mellon University

strubell <at> cmu.edu

James Evans

Max Palevsky Professor in History and Civilizations, The College, University of Chicago

Professor, Department of Sociology, University of Chicago

jevans <at> uchicago.edu

Chris Kennedy

William H. Colvin Professor, Department of Linguistics, University of Chicago

ck <at> uchicago.edu

Kevin Gimpel

Assistant Professor, Toyota Technological Institute at Chicago

gimpel <at> ttic.edu

Industry references and former mentees available by request.