

Jeremiah Lev Milbauer

jeremiah.milbauer.info

Education

Carnegie Mellon University, Pittsburgh PA 2020-2022
MS, Language Technologies Institute (School of Computer Science)
Adviser: Emma Strubell. QPA: 3.97

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 Carillonneurs 🛎️🎵

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

“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

“Paths to Power: Elite Reddit Users Curate Conflict to Drive Division”

Adarsh Mathew, Jeremiah Milbauer, James Evans. jeremiah.milbauer.info/paths_wip.html

“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

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

Green Homesteads

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. jeremiah.milbauer.info/homesteads.html

Mentorship and Service

SCS Masters Advisory Committee, Liaison to the Dean (incoming), Carnegie Mellon University

Undergraduate Thesis Co-adviser, for Deblina Mukherjee, University of Chicago

Committee for a Cognitive Science Major, University of Chicago

Committee for a Science Communication Workshop, University of Chicago

Dorm Council, President, University of Chicago

Mock Trial Team, Coach, University of Chicago

Guild of Carillonneurs, Tour Guide and Teacher, University of Chicago

Honors and Awards

2020-2022 CMU Research Fellowship (Tuition + stipend)
2020 Micro-Metcalf Research Grant (\$2000), University of Chicago
2019 Open Future Essay Competition, Shortlisted 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

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