

# Julia Mendelsohn

## Education

- 2019 – Present **PhD, Information**, *University of Michigan*  
Advisor: Ceren Budak
- 2015 – 2019 **MS, Computer Science**, *Stanford University*  
Specialization: Information Management and Analytics  
GPA: 3.99/4.00
- 2014 – 2018 **BA, Linguistics with Honors**, *Stanford University*  
Minor in German Studies  
Thesis: *Computational linguistic analysis of dehumanization of LGBTQ groups in the media*  
GPA: 4.09/4.00
- 2010 – 2014 **Stuyvesant High School**, *New York*

## Publications

- 2023 **Julia Mendelsohn**, Sayan Ghosh, David Jurgens, and Ceren Budak. *Bridging Nations: Quantifying the Role of Multilinguals in Communication on Social Media*. International Conference on Web and Social Media (ICWSM), 2023.
- 2022 Chan Young Park\*, **Julia Mendelsohn\***, Anjalie Field, and Yulia Tsvetkov. *Challenges and Opportunities in Information Manipulation Detection: An Examination of Wartime Russian Media*. Proceedings of the Findings of the 2022 Conference on Empirical Methods in Natural Language Processing (Findings of EMNLP). [\*=equal contribution]
- 2022 Dallas Card, Serina Chang, Chris Becker, **Julia Mendelsohn**, Rob Voigt, Leah Boustan, Ran Abramitzky, and Dan Jurafsky. *Computational analysis of 140 years of US political speeches reveals more positive but increasingly polarized framing of immigration*. In Proceedings of the National Academy of Sciences 119(31), 2022.
- 2021 Chan Young Park, **Julia Mendelsohn**, Karthik Radhakrishnan, Kinjal Jain, Tushar Kanakagiri, David Jurgens and Yulia Tsvetkov. *Detecting Community Sensitive Norm Violations in Online Conversations*. Proceedings of the Findings of the 2021 Conference on Empirical Methods in Natural Language Processing (Findings of EMNLP).
- 2021 **Julia Mendelsohn**, David Jurgens, and Ceren Budak. *Modeling the framing of immigration on social media*. Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL).
- 2020 **Julia Mendelsohn**, Yulia Tsvetkov, and Dan Jurafsky. *A framework for the computational linguistic analysis of dehumanization*. *Frontiers in Artificial Intelligence* 3:55.
- 2019 Li Lucy and **Julia Mendelsohn**. *Using sentiment induction to understand variation in gendered online communities*. Proceedings for the second annual meeting of the Society for Computation in Linguistics (SCiL). ACL, 2019.
- 2018 Ethan Fast, Binbin Chen, **Julia Mendelsohn**, Jonathan Bassen, and Michael S Bernstein. *Iris: A conversational agent for complex tasks*. In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems. ACM, 2018.

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## Conference Presentations

- 2022 "Sounding the Bullhorn: Surfacing and Analyzing Dogwhistles with Language Models". **Julia Mendelsohn**, Maarten Sap, and Ronan Le Bras.
- *New Ways of Analyzing Variation 50* [presentation]. San Jose, CA. Oct 13-15.
  - *Text as Data (TADA)* [presentation]. New York, NY. Oct 6-7.
- 2022 "Challenges in Opinion Manipulation Detection: An Examination of Wartime Russian Media". Chan Young Park\*, **Julia Mendelsohn\***, Anjalie Field, and Yulia Tsvetkov. *Text as Data (TADA)* [presentation]. New York, NY. Oct 6-7.
- 2021 "Modeling the framing of immigration on social media". **Julia Mendelsohn**, Ceren Budak, and David Jurgens.
- *New Directions in Analyzing Text as Data (TADA)* [poster]. Ann Arbor, MI. Oct 28-29.
  - *Politics and Computational Social Science (PaCSS)* [virtual presentation]. Aug 9-13.
  - *International Conference on Computational Social Science (IC2S2)* [virtual presentation]. Zurich, Switzerland. July 27-31.
- 2021 "Bridging Nations: Quantifying the Influence of Multilinguals in the European Twitter Network" [virtual presentation]. **Julia Mendelsohn**, Sayan Ghosh, Ceren Budak, David Jurgens. *International Conference on Computational Social Science*, Zurich, Switzerland. July 27-31.
- 2020 "A framework for the computational linguistic analysis of dehumanization" [virtual oral presentation]. **Julia Mendelsohn**, Yulia Tsvetkov, and Dan Jurafsky. *International Conference on Computational Social Science*, Boston, MA. July 17-20.
- 2019 "The social meaning of diphthong fronting in Berlin German" [oral presentation]. Jannedy, S., M. Weirich, G. Schüppenhauer & **Julia Mendelsohn**. *Phonetik und Phonologie Tagung*, Düsseldorf, Germany. September 26-27.
- 2018 "Computational linguistic analysis of dehumanization of LGBTQ groups in the media" [poster]. *New Ways of Analyzing Variation 47*, New York, NY. October 18-21.
- 2017 "Cross-community variation in onset /l/ among California Latinx speakers" [oral presentation]. Podesva, R., F. Conover, A. Flores-Perez, C. Gratton, A. Kane, D. Leigh, **Julia Mendelsohn**, C. Rentie & A. Sprenger. *New Ways of Analyzing Variation 46*, Madison, WI. November 2-5.

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## Invited Talks

- 2022 "Mismatches between computational tools and social science needs" [panelist]. *Cassandra Project Roundtable Series*, Ann Arbor, MI. November 11.
- 2021 "Modeling the framing of immigration on social media". **Julia Mendelsohn**, Ceren Budak, and David Jurgens.
- *Carnegie Mellon University Language Technologies Institute*. Pittsburgh, PA. September 17.
  - *Conversational AI and Social Analytics (CAISA) Lab at Philipps Universität Marburg*. Marburg, Germany. September 14.

- 2021 "Pairwise Learning to Rank for Closeup Stream Recommendations". *Pinterest ML Lunch Series*, San Francisco, CA. June 10.
- 2021 "Uncovering dehumanization with computational linguistics". *University of Washington Center for Statistics and the Social Sciences Seminar*, Seattle, WA. January 20.
- 2020 "A computational analysis of immigration discourse on Twitter". *University of Michigan Sociolinguistics, Contact, and Discourse (SoConDi) Meeting*, Ann Arbor, MI. October 30.
- 2020 "A framework for the computational linguistic analysis of dehumanization". *University of Michigan Computational Social Science/Data Science Seminar*, Ann Arbor, MI. February 20.
- 2019 "Representations of African American English in Disney films". *African American Vernacular English (Stanford undergraduate course)*, Stanford, CA. February 9.
- 2018 "Understanding social change with NLP: a case study of LGBTQ representation in the *New York Times*". *Leibniz-Zentrum Allgemeine Sprachwissenschaft*, Berlin, Germany. August 29.

## Industry Experience

- 05/22 – 08/22 **Allen Institute for Artificial Intelligence**, Seattle, WA  
*Research Intern (Mosaic Commonsense Team)*  
*Mentors: Ronan Le Bras, Maarten Sap*  
 Proposed, designed, and conducted a research project about dogwhistles (coded rhetoric). Compiled a rich glossary of dogwhistles, measured the ability of large language models (GPT-3) to surface new dogwhistles and identify hidden meanings, and demonstrated how dogwhistles evade content moderation tools.
- 05/21 – 07/21 **Pinterest**, San Francisco, CA  
*Pinterest Labs Research Intern (Machine Learning)*  
*Mentor: Travis Ebesu, Manager: Bo Fu*  
 Designed and implemented a new deep learning model for recommending related pins using pairwise learning to rank. Conducted offline evaluation and online A/B experiments to analyze tradeoffs between information retrieval metrics, user engagement, and content relevance.
- 06/15 – 09/15 **Hewlett Packard**, Palo Alto, CA  
*HP Labs Technical Intern*  
 Improved accessibility of HP's "Cog ex Machina" deep learning software platform by providing feedback and suggestions based on problems encountered while implementing neural network architectures in Cog.

## Research Experience

- 09/19 – Present **School of Information**, *University of Michigan*  
*PIs: Ceren Budak and David Jurgens*  
 Currently working as a Graduate Student Research Assistant in developing (1) computational techniques to analyze the framing of political issues on social media, (2) causal inference studies to estimate effects of multilingual Twitter users on information diffusion, and (3) transfer learning models for cost-effective labeling of social movement data.
- 06/17 – 12/18 **Natural Language Processing Group**, *Stanford University*  
*PI: Dan Jurafsky*  
 Synthesized theories from natural language processing, linguistics, and social psychology to quantify and understand dehumanization of marginalized groups in print media and online.
- 06/18 – 09/18 **Phonetics Laboratory**, *Leibniz-Zentrum Allgemeine Sprachwissenschaft*, Berlin, Germany  
*PI: Stefanie Jannedy*  
 Analyzed diphthongs produced by speakers of Kiezdeutsch (Hood German) and Berlin dialect in order to identify distinctive features of Kiezdeutsch and variation within Kiezdeutsch speakers.

06/16 – 03/17 **Human-Computer Interaction Group, Stanford University**  
*PI: Michael Bernstein*  
Helped create a conversational agent that draws on human conversational strategies to accomplish complex goals. Worked with numerous NLP tools and published tasks on Amazon Mechanical Turk.

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## Teaching Experience

03/19 – 06/19 **African American Vernacular English, Stanford University**  
Teaching Assistant for Professor John Rickford's undergraduate sociolinguistics course

01/19 – 03/19 **From Languages to Information, Stanford University**  
Course Assistant for Professor Dan Jurafsky's undergraduate NLP course

09/14 – 06/18 **English as a Second Language, Stanford University**  
Volunteer tutor for Stanford custodial staff through Habla organization

09/14 – 06/17 **Mathematics and Writing, Stanford University**  
Volunteer tutor-mentor for middle school students through East Palo Alto Stanford Academy (EPASA)

03/2018 **From Languages to Information, Stanford University**  
Exam grader for Professor Dan Jurafsky's undergraduate NLP course

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## Awards, Honors, and Fellowships

2022 **Google PhD Fellowship Recipient**

2022 **Meta (Facebook) PhD Research Fellowship Finalist**

2021 **Twitch Research Fellowship Finalist**

2020 **NSF Graduate Research Fellowship Program Honorable Mention**

2019 **Scholarship for Uriel Weinreich Program in Yiddish Language, Literature, and Culture, YIVO Institute for Jewish Research, New York, NY**

2018 **J.E. Wallace Sterling Award for Scholastic Achievement**, Awarded to top 25 seniors in Stanford's School of Humanities and Sciences

2018 **Delta Phi Alpha**, National German honor society

2018 **Krupp Foundation Stipend Recipient**, Supported Stanford-affiliated work in Germany

2017 **Phi Beta Kappa**, Inducted junior year

2017 **Sponsor's Award**, Natural Language Processing with Deep Learning poster fair

2015 **The President's Award for Academic Excellence**, Awarded to top 5% of Stanford freshmen

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## Professional Service

*Reviewing*

International Journal of Press/Politics (2022)

EMNLP (2022)

NAACL (ACL Rolling Review) (2022)

ACL (2021)

NLP for Positive Impact Workshop (2021, 2022)

NLP+CSS Workshop at EMNLP (2020, 2022)

IC2S2 (2022)

*Service*           UMSI Doctoral Executive Committee (2021-2022)  
                      NAACL 2022 Student Volunteer  
                      EMNLP 2022 Student Volunteer

*Memberships*    Association for Computational Linguistics (ACL)

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## Skills

*Languages*       English (native), German (high intermediate), Spanish (intermediate), Yiddish (low intermediate)

*Programming*    Python, R, SQL, Java, C/C++,  $\text{\LaTeX}$ , Praat

*NLP/ML*           SpaCy, Pandas, scikit-learn, Tensorflow, PyTorch, Transformers, NLTK, Apache Spark