

Saadia Gabriel

Email: skgabrie@cs.ucla.edu



Website: <https://saadiagabriel.com/>

PI: UCLA Misinformation, AI and Responsible Society Lab

Employment History








- 2024 – ····  **University of California, Los Angeles**
Samueli School of Engineering, Computer Science
Assistant Professor
- 2023-2024  **New York University**
Center for Data Science
Faculty Fellow/Assistant Professor
- 2023  **Massachusetts Institute of Technology**
Computer Science & Artificial Intelligence Laboratory
Postdoctoral Fellow
- 2020, 2021  **Microsoft Research**
AI/NLP Research Intern
- 2019-2020  **Allen Institute for Artificial Intelligence**
Mosaic Team Research Intern
- 2019  **SRI International**
Computer Vision & Learning Research Intern
- 2015, 2016  **University of Massachusetts, Amherst**
Data Science Research Assistant

Education




- 2017 – 2023  **University of Washington**, PhD in Computer Science & Engineering.
Advisors: Yejin Choi and Franziska Roesner
- 2013 – 2017  **Mount Holyoke College**, BA (*summa cum laude*) in Computer Science & Mathematics.
Thesis Advisor: Daniel Sheldon

Awards & Honors

PI Fellowships & Awards

-  Forbes 30 Under 30, Science 2024 List
-  Outstanding Reviewer, ACL 2020 and NAACL 2022
-  Google-Leap Fellowship, 2021
-  Phi Beta Kappa, 2017
-  Weaver Award for Computer Science and Math, Mount Holyoke College, 2017
-  David Notkin Endowed Graduate Fellowship, University of Washington, 2017
-  ARCS Foundation Fellowship, 2017

Paper Awards

-  MIT Generative AI Impact Award, *Generative AI in the Era of "Alternative Facts"*, 2023
-  Best Paper, *Social Bias Frames*, West Coast NLP Summit 2020
-  Best Paper Nomination, *Early Fusion for Goal Directed Robotic Vision*, IROS 2019

Awards & Honors (continued)

- 🏆 Best Paper Nomination, *The Risk of Racial Bias in Hate Speech Detection*, ACL 2019

Research Publications

Preprints and Working Papers









- 1 S. Gabriel, J. X. Han, E. Liu, *et al.*, “Advancing Equality: Harnessing Generative AI to Combat Systemic Racism,” <https://mit-genai.pubpub.org/pub/1ake7rfu>, Mar. 2024.
- 2 S. Rahman, L. Y. Jiang, S. Gabriel, Y. Aphinyanagphongs, E. K. Oermann, and R. Chunara, “Generalization in Healthcare AI: Evaluation of a Clinical Large Language Model,” 2024. 🔗 URL: <https://api.semanticscholar.org/CorpusID:267750868>.

Journal Articles

- 1 L. Jiang, J. D. Hwang, C. Bhagavatula, *et al.*, “An Empirical Investigation of Machines’ Capabilities for Moral Judgment with the Delphi Experiment,” *Nature Machine Intelligence (Conditionally Accepted)*, 2024. 🔗 URL: <https://arxiv.org/abs/2110.07574>.
- 2 X. Xu, B. Yao, Y. Dong, *et al.*, “Mental-LLM: Leveraging Large Language Models for Mental Health Prediction via Online Text Data,” *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.*, vol. 8, no. 1, Mar. 2024. 🔗 DOI: 10.1145/3643540.

Conference and Workshop Proceedings


- 1 S. Gabriel, L. Lyu, J. Siderius, M. Ghassemi, J. Andreas, and A. Ozdaglar, “Generative AI in the Era of ‘Alternative Facts,’” in *Empirical Methods in Natural Language Processing (EMNLP)*, <https://arxiv.org/abs/2410.09949>, Nov. 2024.
- 2 S. Gabriel, I. Puri, X. Xu, M. Malgaroli, and M. Ghassemi, “Can AI Relate: Testing Large Language Model Response for Mental Health Support,” in *Empirical Methods in Natural Language Processing (EMNLP) Findings*, Nov. 2024. 🔗 URL: <https://api.semanticscholar.org/CorpusID:269921604>.
- 3 J. Lee, X. Lu, J. Hessel, *et al.*, “How to Train Your Fact Verifier: Knowledge Transfer with Multimodal Open Models,” in *Empirical Methods in Natural Language Processing (EMNLP) Findings*, Nov. 2024. 🔗 URL: <https://api.semanticscholar.org/CorpusID:270870580>.
- 4 K. Deng, A. Ray, R. Tan, S. Gabriel, B. A. Plummer, and K. Saenko, “Socratis: Are large multimodal models emotionally aware?” In *ICCV WECEIA*, 2023. 🔗 URL: <https://api.semanticscholar.org/CorpusID:261395214>.
- 5 S. Gabriel, S. Hallinan, M. Sap, *et al.*, “Misinfo Reaction Frames: Reasoning about readers’ reactions to news headlines,” in *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, S. Muresan, P. Nakov, and A. Villavicencio, Eds., Dublin, Ireland: Association for Computational Linguistics, May 2022, pp. 3108–3127. 🔗 DOI: 10.18653/v1/2022.acl-long.222.
- 6 S. Gabriel, H. Palangi, and Y. Choi, “NaturalAdversaries: Can naturalistic adversaries be as effective as artificial adversaries?” In *Findings of the Association for Computational Linguistics: EMNLP 2022*, Y. Goldberg, Z. Kozareva, and Y. Zhang, Eds., Abu Dhabi, United Arab Emirates: Association for Computational Linguistics, Dec. 2022, pp. 5635–5645. 🔗 DOI: 10.18653/v1/2022.findings-emnlp.413.
- 7 T. Hartvigsen, S. Gabriel, H. Palangi, M. Sap, D. Ray, and E. Kamar, “ToxiGen: A large-scale machine-generated dataset for adversarial and implicit hate speech detection,” in *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, S. Muresan, P. Nakov, and A. Villavicencio, Eds., Dublin, Ireland: Association for Computational Linguistics, May 2022, pp. 3309–3326. 🔗 DOI: 10.18653/v1/2022.acl-long.234.

- 8 S. Gabriel, A. Bosselut, J. Da, *et al.*, “Discourse understanding and factual consistency in abstractive summarization,” in *Proceedings of the 16th Conference of the European Chapter of the Association for Computational Linguistics: Main Volume*, P. Merlo, J. Tiedemann, and R. Tsarfaty, Eds., Online: Association for Computational Linguistics, Apr. 2021, pp. 435–447.  DOI: 10.18653/v1/2021.eacl-main.34.
- 9 S. Gabriel, A. Celikyilmaz, R. Jha, Y. Choi, and J. Gao, “GO FIGURE: A meta evaluation of factuality in summarization,” in *Findings of the Association for Computational Linguistics: ACL-IJCNLP 2021*, C. Zong, F. Xia, W. Li, and R. Navigli, Eds., Online: Association for Computational Linguistics, Aug. 2021, pp. 478–487.  DOI: 10.18653/v1/2021.findings-acl.42.
- 10 Z. Cheng, S. Gabriel, P. Bhambhani, *et al.*, “Detecting and tracking communal bird roosts in weather radar data,” in *Proceedings of the AAAI Conference on Artificial Intelligence*, vol. 34, Apr. 2020, pp. 378–385.  DOI: 10.1609/aaai.v34i01.5373.
- 11 S. Gabriel, C. Bhagavatula, V. Shwartz, R. L. Bras, M. Forbes, and Y. Choi, “Paragraph-level commonsense transformers with recurrent memory,” in *AAAI Conference on Artificial Intelligence*, 2020.  URL: <https://api.semanticscholar.org/CorpusID:222134165>.
- 12 M. Sap, S. Gabriel, L. Qin, D. Jurafsky, N. A. Smith, and Y. Choi, “Social Bias Frames: Reasoning about social and power implications of language,” in *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, D. Jurafsky, J. Chai, N. Schluter, and J. Tetreault, Eds., Online: Association for Computational Linguistics, Jul. 2020, pp. 5477–5490.  DOI: 10.18653/v1/2020.acl-main.486.
- 13 A. Amini, S. Gabriel, S. Lin, R. Koncel-Kedziorski, Y. Choi, and H. Hajishirzi, “MathQA: Towards interpretable math word problem solving with operation-based formalisms,” in *Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Volume 1 (Long and Short Papers)*, J. Burstein, C. Doran, and T. Solorio, Eds., Minneapolis, Minnesota: Association for Computational Linguistics, Jun. 2019, pp. 2357–2367.  DOI: 10.18653/v1/N19-1245.
- 14 M. Sap, D. Card, S. Gabriel, Y. Choi, and N. A. Smith, “The risk of racial bias in hate speech detection,” in *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics*, A. Korhonen, D. Traum, and L. Màrquez, Eds., Florence, Italy: Association for Computational Linguistics, Jul. 2019, pp. 1668–1678.  DOI: 10.18653/v1/P19-1163.
- 15 A. Walsman, Y. Bisk, S. Gabriel, *et al.*, “Early fusion for goal directed robotic vision,” in *2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2019, pp. 1025–1031.  DOI: 10.1109/IROS40897.2019.8968165.

Patents

- 1 H. Palangi, S. Gabriel, T. Hartvigsen, D. Ray, M. Sap, and E. Kamar, *Adversarial language imitation with constrained exemplars*.

Teaching

Instructor  Data Science Capstone (DS-GA 1006). New York University, Fall 2023.

Teaching (continued)

Guest Lecturer	<ul style="list-style-type: none">■ Ethical Machine Learning In Human Deployments. Massachusetts Institute of Technology, Spring 2024.Computational Ethics. Carnegie Mellon University, Spring 2023 and 2024.Natural Language Processing. Massachusetts Institute of Technology, Fall 2023.AI Ethics. Oakton College, Fall 2023.Natural Language Processing (Undergrad). University of Washington, Spring 2023.Intro to Machine Learning. University of Washington, Fall 2022.Natural Language Processing. Mount Holyoke College, Fall 2019.NLP State-of-the-Art Methods. Carlson School of Management, Fall 2019.
Teaching Assistant	<ul style="list-style-type: none">■ Natural Language Processing (Undergrad/Grad). University of Washington.Real Analysis. Mount Holyoke College.



Selected Talks & Panels

- Invited talk at UCLA Statistics and Data Science Seminar, March 2024.
- NeurIPS panelist on "Becoming a Successful AI Researcher/Engineer," December 2023.
- Invited talk at NYU Center for Data Science Lunch Seminar, November 2023.
- Invited talk at Northeastern, November 2023.
- Invited talk at NYU-KAIST Inclusive AI Workshop, November 2023.
- Invited talk at Mount Holyoke College Computer Science and Mathematics Lunch Seminar, October 2023.
- NYU Academic Careers panelist, Fall 2023.
- University of Washington Academic Careers panelist, Fall 2023.
- Panelist for CHIL 2023 session on *LLMs and Healthcare*, June 2023.
- Invited talk at Spotify NYC, June 2023.
- Invited talk at Cornell JEDI Dialogues Seminar, April 2022.
- Darpa SemaFor Workshop keynote, February 2022.
- Invited talk at Stanford NLP Seminar, December 2021.
- Presentation at MIT EECS Rising Stars Workshop, October 2021.
- Invited talk at UMass Amherst Rising Stars Colloquium, January 2021.
- Invited talk at NeurIPS 2020 Resistance AI Workshop, December 2020.
- Panelist for Voice Tech Global session on *Implicit Bias in Conversational AI*, July 2020.






Service

Area Chairing	<ul style="list-style-type: none">■ ARR (EMNLP 2024), ICLR 2025
Reviewing	<ul style="list-style-type: none">■ ACL*, NAACL*, EMNLP, NeurIPS, AAAI, ICLR, ICML, Computational Linguistics, Journal of Artificial Intelligence, Journal of the American Medical Informatics Association, npj Digital Medicine (*Outstanding Reviewer)

Service (continued)

- Organizing Committee  NeurIPS 2023, Tutorial Co-Chair
NAACL 2022, Socio-Cultural Inclusion Co-Chair and Generation Session Chair
SIGDIAL 2021, Safety for E2E Conversational AI Special Session
- Peer Mentoring  GEM Computer Science Mentor at Mount Holyoke College (Spring 2016)

Misc

-  Author of "The Nightghosts' Child" novel.
-  Inventor of a solar charging jacket called "The Turtle."
-  University of Washington NLP Retreat Organizer (2018, 2019).
-  University of Washington CSE Visit Days Committee (2018).
-  Mount Holyoke College CS Department Chair Student Search Committee (2016-2017).