Caleb Ziems

Curriculum Vitae

I work on socially competent and equitable NLP systems that are more aware of social norms and robust to language variation. My work also supports safety and wellbeing in online communities.

Education

2023-Present Stanford University, Ph.D. in Computer Science.

NLP Group

Advisor: Diyi Yang

2020–2023 **Georgia Institute of Technology**, *M.S. in Computer Science*.

School of Interactive Computing

Advisor: Diyi Yang

Cumulative GPA: 3.95/4.0

2016–2020 **Emory University**, B.S. in Computer Science (highest honors), B.A. in Mathematics.

Thesis: Towards More Robust Methods of Cyberbullying Detection

Advisor: Ymir Vigfusson Cumulative GPA: 4.0/4.0

Publications

2023 Ziems, C.*, Held, W.*, Yang, J., & Yang, D. (2023). Multi-VALUE: A Framework

ACL for Cross-Dialectal English NLP. In Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics. PDF

2023 Ziems, C., Dwivedi-Yu, J., Wang, Y., Halevy, A. Y., & Yang, D. (2023). NormBank:

ACL A Knowledge Bank of Situational Social Norms. In Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics. PDF

2023 Shaikh, O.*, **Ziems, C.***, Held, W., Pariani, A. J., Morstatter, F., & Yang, D. (2023).

ACL Modeling Cross-Cultural Pragmatic Inference with Codenames Duet. In Proceed-Findings ings of the 61st Annual Meeting of the Association for Computational Linguistics:

Findings.PDF

2023 Held, W., Ziems, C., & Yang, D. (2023). TADA: Task-Agnostic Dialect Adapters for

ACL English. In Proceedings of the 61st Annual Meeting of the Association for Computa-

Findings tional Linguistics: Findings. PDF

2022 Ziems, C., Chen, J., Harris, C., Anderson, A., & Yang, D. (2022). VALUE: Under-

ACL standing Dialect Disparity in NLU. In Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics and the 12th International Joint Conference on Natural Language Processing. PDF

- 2022 Ziems, C., Yu, J. A., Wang, Y., Halevy, A. Y., & Yang, D. (2022). The Moral Integrity Corpus: A Benchmark for Ethical Dialogue Systems. In Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics and the 12th International Joint Conference on Natural Language Processing. PDF
- Ziems, C.*, Li, M.*, Zhang, A., & Yang, D. (2022). Inducing Positive Perspectives with Text Reframing. In Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics and the 12th International Joint Conference on Natural Language Processing. PDF Outstanding Paper Award.
- Ziems, C.*, ElSherief, M.*, Muchlinski, D., Anupindi, V., Seybolt, J., De Choudhury, M., & Yang, D. (2021). Latent Hatred: A Benchmark for Understanding Implicit Hate Speech. In Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing. PDF
- 2021 **Ziems, C.**, Yang, D. (2021). To Protect and To Serve? Analyzing Entity-Centric **EMNLP** Framing of Police Violence. In Proceedings of the 2021 Conference on Empirical Findings Methods in Natural Language Processing: Findings. PDF
- 2021 He, B., **Ziems, C.**, Soni, S., Ramakrishnan, N., Yang, D., & Kumar, S. (2021). Racism **ASONAM** is a Virus: Anti-Asian Hate and Counterhate in Social Media during the COVID-19 Crisis. In 2021 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining. IEEE. PDF
 - 2020 Ziems, C., Vigfusson, Y., & Morstatter, F. (2020) Aggressive, Repetitive, Intentional, ICWSM Visible, and Imbalanced: Refining Representations for Cyberbullying Classification. In Proceedings of the 14th International AAAI Conference on Web and Social Media. PDF.

Honorable Mention for Best Paper Award.

Pre-prints

2023 **Ziems, C.**, Held, W., Shaikh, O., Chen, J., Zhang, Z., & Yang, D. (2023) Can Large Pre-Print Language Models Transform Computational Social Science? PDF.

Experience

- May 2022 Meta Al Integrity, Research Intern.
- August 2022 Manager: Alon Halevy

Peers: Jane Yu, Yi-Chia Wang

May 2021 - Meta Al Integrity, Research Intern.

Sep 2021 Manager: Alon Halevy

Peers: Jane Yu, Yi-Chia Wang

August 2020 - Georgia Tech SALT Lab, Graduate Research Assistant.

Present Advisor: Diyi Yang

March 2020 - Georgia Tech CLAWS Research Group, Undergraduate Research Assistant.

May 2020 Advisor: Srijan Kumar

June 2019 - USC/ISI MINDS Research Group, NSF REU Fellow.

August 2019 Advisor: Fred Morstatter

June 2018 - **Stanford InfoLab**, NSF REU Fellow.

August 2018 Advisor: Srijan Kumar

PI: Jure Leskovec

August 2017 - Emory Concept Mining Lab, Undergraduate Research Assistant.

May 2018 Advisor: Phillip Wolff

Teaching

January 2022 CS 6471 Computational Social Science, Graduate Teaching Assistant.

- May 2022 Co-designed the CS 6471 curriculum - Co-designed the course schedule of assigned readings
 - Co-designed project report and presentation rubrics
 - Designed quizzes and bi-weekly reading response questions
 - Graded reports and presentations

August 2017 - Emory Office for Undergraduate Education, EPASS Peer Tutor.

May 2018 • Worked one-on-one with 10 to 20 different undergraduates each semester

Explained Calculus I and II concepts, designed problem sets, and offered individual feedback

Mentoring

Spring 2023 - **Daniel Shin**, Stanford University

Present Topic: RL for Value-Alignment

Fall 2022 - Julia Kruk, Georgia Institute of Technology

Present Topic: Computational Aesthetics and Photojournalism

Result: One EMNLP 2023 Paper In Preparation.

Spring 2022 - **Aryan Pariani**, Georgia Institute of Technology

Present Topic: Pragmatic Reasoning in Language Games

Result: One ACL 2023 Paper In Submission.

Spring 2021 - Minzhi (Ella) Li, National University of Singapore

Present Topic: Positive Reframing

Result: Outstanding Paper Award.

Fall 2021 - **Taiwei Shi**, Georgia Institute of Technology

Spring 2022 Topic: Dialect-Aware NLP Result: Undergraduate Thesis

Awards and Honors

Dec 2022 Honorable Mention for Best Project, CS 7643 Deep Learning @ Georgia Tech.

May 2022 **Outstanding Paper**, ACL 2022.

March 2021 **NSF Graduate Research Fellowship**.

June 2020 Honorable Mention for Best Paper, ICWSM 2020.

May 2020 Summa Cum Laude, Emory University Computer Science Department.

May 2020 Academic Excellence Award, Emory University Computer Science Department.

November Phi Beta Kappa.

2018 Elected as a Junior

August 2017 Norman C. and Henry J. Miller Dean's Achievement Scholarship.

\$30,000 scholarship recognizing academic achievement, leadership, and community involvement

Skills

Languages Python, MATLAB, R, Java, C, Prolog, Scheme (LISP), JavaScript

Libraries PyTorch, Scikit-learn, Numpy, Pandas, spaCy, NetworkX, BeautifulSoup

Tools HTML/CSS, PostgreSQL, Github, LATEX, Amazon Mechanical Turk API

Software Bash, Vim, Gephi, Jupyter, Eclipse

Service

Reviewing ACM CSCW (2021);

ACL / ARR Review (2021, 2022, 2023)

Volunteer EMNLP (2021)

Talks and Miscellanea

October 4, Panel Member for CS 7001 Introduction to Graduate Studies at Georgia Tech.

2022 Topic: National Fellowships

February 24, Student Host for Yian Yin, Faculty Candidate in the School of Interactive Computing

2022 Topic: Science of Science and Network Science

February 14, Speaker at IST-Unbabel Seminar

2022 Title: Social NLP for Positive and Civil Interactions

November 17, Guest Lecturer for CS 4650 Natural Language Processing at Georgia Tech

2021 Topic: Dialect-Aware NLP + Computational Social Science

October 5, Panel Member for CS 7001 Introduction to Graduate Studies at Georgia Tech.

2021 Topic: National Fellowships