Nicholas Deas

curriculum vitae
ndeas@cs.columbia.edu | (843) 295-9530
195 Claremont Ave, Apt 30B, New York, NY 10027

GitHub NickDeas   in ndeas

EDUCATION

Columbia University   **New York, NY**
PhD in Computer Science   **September, 2022 - Present**
    Advisor: Professor Kathleen McKeown
    Research Focus: Natural Language Processing, Bias and Fairness, Computational Social Science
    NSF Graduate Research Fellow, Provost Diversity Fellow,
MPhil in Computer Science   **September, 2022 - December 2025**
    Earned as part of doctoral program
    GPA: 4.0
MS in Computer Science   **September, 2022 - May 2024**
    Earned as part of doctoral program
    GPA: 4.0
Clemson University   **Clemson, SC**
BS in Computer Science; BS in Psychology, minor in Business   **August, 2018 - May, 2022**
    GPA: 4.0
    Calhoun Honors College, National Scholars Program

RESEARCH EXPERIENCE

Columbia University   **New York, NY**
Graduate Research Assistant   **September, 2022 - Present**
- Drawing on linguistic and social science theory to evaluate and develop socially aware language technologies
- Ensuring the safe and equitable deployment of language models and tools through mitigating societal biases

Clemson University   **Clemson, SC**
Social Psychology Creative Inquiry Researcher   **August, 2020 - May, 2022**
- Developed machine learning models to classify Reddit posts by psychological constructs like mattering
- Assisted in development of 4 survey studies concerning Greek Life, mattering, vaccines, and mask mandates during the COVID-19 pandemic
- Presented research on mass shootings and mask/vaccine perceptions at national conferences

Machine Learning Creative Inquiry Researcher   **August, 2018 - May, 2022**
- Coded automated web-scraper to generate data set of over 2 million congressional Tweets
- Developed and evaluated machine learning models for sentiment and topic classification
- Co-authored 2 research papers in preparation to be submitted and gave 2 presentations at national

conferences

Natural Language Processing Undergraduate Researcher   **May, 2020 - August, 2021**
- Tested novel model architecture to correct speech recognition system outputs
- Co-authored a manuscript on application with speech recognition to battlefield medic data

TEACHING EXPERIENCE

Columbia University/Barnard College   **New York, NY**
Teaching Assistant, Natural Language Processing   **August 2025 - December 2025**
Graduate Student Mentor, LaidLaw Scholars Program   **May 2025 - July 2025**
- Mentored 6 sophomores in Computer Science, Psychology, and Political science students on their chosen research
- Gave weekly lectures on research methods, publishing, and academic careers

Teaching Assistant, Natural Language Processing   **August 2024 - December 2024**
Teaching Assistant, Language Generation and Summarization Seminar   **August 2023 - December 2023**

SPEAKING EXPERIENCE

Research in NLP at Columbia (w/ Kathleen McKeown)
- ARNI Summer 2025 Talk Series, Columbia University   **July, 2025**

Ethical Issues in Language Representations
- Semantic Representations for NLP Guest Lecture, Columbia University   **June, 2025**

Ethical Issues of Algorithms and AI
- Advocacy in Emergent Technology, UPenn   **October, 2024**

African American Language Bias and Large Language Models
- NLP Seminar, Columbia University   **October, 2023**
- Language Generation Seminar Guest Lecture, Columbia University   **November, 2023**
- ScholarTalks, Columbia University   **January, 2023**

MENTORSHIP EXPERIENCE

Ellie Yang, REU Researcher, Amherst College   **May, 2025 - Present**
Nathan Demmsie, Undergraduate Researcher, Columbia University   **January, 2025 - Present**
Blake Vente, Masters Researcher, Columbia University   **January 2024 - Present**
LaidLaw Scholars, Columbia College   **May, 2025 - July, 2025**
Armand Link, Undergraduate & Masters Researcher, Columbia University   **May, 2024 - July, 2025**
Marvin Limpijankit, Masters Researcher, Columbia University   **September, 2024 - September, 2025**
Narutatsu Ri, Masters Researcher, Columbia University   **September, 2024 - May, 2025**
Xinmeng Hou, Masters Researcher, Teacher's College   **September, 2023 - May, 2024**
Sreya Nandanampati, Undergraduate Researcher, Barnard College   **May, 2023 - December 2023**
Fahnmusa Edwards, Undergraduate Researcher, MIT   **May, 2023 - December 2023**

Iván Pérez Mejía, Undergraduate Researcher, Columbia University **September, 2023 - Present**
Tajh Martin, Undergraduate Researcher, Columbia University **January, 2023 - Present**

AWARDS AND HONORS

Provost Diversity Fellows Mini Grant, Columbia University Office of the Provost **July, 2023**
NSF Graduate Research Fellowship, National Science Foundation **September, 2022**
Presidential Fellowship, Columbia School of Engineering and Applied Sciences **September, 2022**
Provost Diversity Fellowship, Columbia University Office of the Provost **September, 2022**
Phi Kappa Phi Certificate of Merit, Clemson School of Engineering **April, 2022**
Academic Excellence Award, Clemson College of Behavioral, Social, and Health Sciences **April, 2022**
Davenport Scholars, Clemson Psychology Department **January, 2021/2022**
Best Undergraduate Research Poster, Midwest Political Science Association **April, 2020**
Cullinet Outstanding Senior Award, Clemson School of Computing **April, 2020**
DuPont Best Undergraduate Project Scholarship, Clemson School of Computing **August, 2020**
National Scholars Program (full scholarship), Clemson University **August, 2018**

PUBLICATIONS
Presentations in *CL venues are treated as publications. Entries in other venues are journal publications.

Mukur Gupta, Nikhil Reddy Varimalla, **Nicholas Deas**, Melanie Subbiah, and Kathleen McKeown. 2025. AdvSumm: Adversarial Training for Bias Mitigation in Text Summarization. Submitted to *International National Language Generation Conference.* Hanoi, Vietnam. Association for Computational Linguistics.

Marvin Limpijankit, Yanda Chen, Melanie Subbiah, **Nicholas Deas**, and Kathleen McKeown. 2025. Counterfactual Simulatability of LLM Explanations for Generation Tasks. Submitted to *International National Language Generation Conference.* Hanoi, Vietnam. Association for Computational Linguistics.

Nicholas Deas and Kathleen McKeown. 2025. Artificial Impressions: Evaluating Large Language Model Behavior Through the Lens of Trait Impressions. Submitted to *Proceedings of the 2025 Conference on Empirical Methods in Natural Language Processing.* Suzhou, China. Association for Computational Linguistics.

Nicholas Deas, Blake Vente, Amith Ananthram, Jessi Grieser, Shana Kleiner, Desmond Patton, James Shepard, Kathleen McKeown. 2025. Data Caricatures: On the Representation of African American Language in Pretraining Corpora. In *Proceedings of the 64rd Annual Meeting of the Association for Computational Linguistics.* Vienna, Austria. Association for Computational Linguistics.

Narutatsu Ri, **Nicholas Deas,** Kathleen McKeown. 2025. Reranking-Based Generation for Unbiased Perspective Summarization. Submitted to *Proceedings of the 64th Annual Meeting of the Association for Computational Linguistics.* Vienna, Austria. Association for Computational Linguistics.

Joel Mire, Zubin Trivadi Aysola, Danial Chechelnitsky, **Nicholas Deas**, Chrysoula Zerva, Maarten Sap. 2025. Rejected Dialects: Biases Against African American Language in Reward Models. In *Proceedings of the 2025 Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics.* Albuquerque, New Mexico, USA. Association for Computational Linguistics.

Tyler Hendley, **Nicholas Deas**, Sophia Finnell, Robin Kowalski. 2025. Mass Shootings in the 21st

Century: An Examination through the Lens of the Interpersonal Psychological Theory of Suicide. In *Journal of Mass Violence Research.*

Shana Kleiner, Jessica A Grieser, Shug Miller, James Shepard, Javier Garcia-Perez, **Nicholas Deas**, Desmond Patton, Elsbeth Turcan, Kathleen McKeown. Unmasking Camouflage: Exploring the Challenges of Large Language Models in Deciphering African American Language & Online Performativity. In *AI and Ethics.*

Nicholas Deas, Kathleen McKeown. 2025. Summarization of Opinionated Political Documents with Varied Perspectives. In *Proceedings of the 31st International Conference on Computational Linguistics,* pages 8088-8108, Abu Dhabi, UAE. Association for Computational Linguistics.

Nicholas Deas, Elsbeth Turcan, Ivan Ernesto Perez Mejia, and Kathleen McKeown. 2024. MASIVE: Open-Ended Affective State Identification in English and Spanish. In *Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing*, pages 20467-20485, Miami, Florida, USA. Association for Computational Linguistics.

Nicholas Deas, Xinmeng Hou, Shana Kleiner, Tajh Martin, Sreya Nandanampati, Desmond Patton, Kathleen McKeown. 2024. PhonATe: Impact of Type-Written Phonological Features of African American Language on Generative Language Modeling Tasks. In *Proceedings of the First Conference on Language Modeling*, Philadelphia, Pennsylvania, USA.

Jeffrey A. Fine, D. Hudson Smith, Cierra Oliveira, **Nicholas Deas**, Spencer Shellnutt, Riley Stotzky, and Rachel Clyburn. 2024. How Negativity and Policy Content Drive the Spread of Political Messages. *Journal of Information Technology and Politics,* pages 1-10.

Nicholas Deas, Jessica Grieser, Shana Kleiner, Desmond Patton, Elsbeth Turcan, and Kathleen McKeown. 2023. Evaluation of African American Language Bias in Natural Language Generation. In *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing*, pages 6805-6824, Singapore. Association for Computational Linguistics.

Nicholas Deas, Robin Kowalski, Sophie Finnell, Emily Radovic, Hailey Carroll, Chelsea Robbins, Andrew Cook, Kenzie Hurley, Natalie Cote, Kelly Evans, Isabel Lorenzo, Kelly Kiser, Gabriella Mochizuki, Meredith Mock, and Lindsey Brewer. 2023. I Just Want to Matter: Examining the Role of Anti-mattering in Online Suicide Support Communities Using Natural Language Processing. *Computers in Human Behavior*.

Robin Kowalski, **Nicholas Deas**, Noah Britt, Emily Richardson, Sophie Finnell, Kelly Evans, Hailey Carroll, Andrew Cook, Emily Radovic, Tanner Huyck, Bella Parise, Chelsea Robbins, Hannah Chitty, and Sophie Catanzaro. 2022. Protection Motivation Theory and Intentions to Receive the COVID-19 Vaccine. *Health Promotion Practice* (2023).

Minjae Woo, Prabodh Mishra, Ju Lin, Snigdhaswin Kar, **Nicholas Deas**, Caleb Linduff, Sufeng Niu, Yuzhe Yang, Jerome McClendon, D. Hudson Smith, Stephen L. Shelton, Christopher E. Gainey, William C. Gerard, Melissa C. Smith, Sarah F. Griffin, Ronald W. Gimbel, and Kuang-Ching Wang. 2021. Complete and Resilient Documentation (CARD) for Operational Medical Environments Leveraging Mobile Hands-free Technology in a Systems Approach. *JMIR mHealth and uHealth* 9, 10 (2021).

Robin Kowalski, Kenzie Hurley, **Nicholas Deas**, Sophie Finnell, Kelly Evans, Chelsea Robbins, Andrew Cook, Emily Radovic, Hailey Carroll, Lindsey Brewer, and Gabby Mochizuki. 2021. PMT Unmasked: Applying the Protection Motivation Theory of Health to Skepticism Toward COVID Mask and Vaccine Mandates. *AIMS Public Health 9, 3* (2021), 506-520.

CONFERENCE PRESENTATIONS

Desmond Upton Patton, Shana Kleiner, **Nicholas Deas**, Shug Miller, Jessica A. Grieser, James Shepard, Blake Vente, and Kathleen McKeown. 2025. AI with Heart: A Joy-Centered Framework for Ethical AI Development & Implementation. In *Paris Conference on AI & Digital Ethics.* Sorbonne University, France.

Tyler Hendley, **Nicholas Deas**, Sophie Finnell, and Robin M. Kowalski. 2024. An Examination of Mass Shooters in the 21st Century in Relation to the Interpersonal Theory of Suicide. In *Association for Behavioral and Cognitive Therapies*, Philadelphia, PA.

Jessica A. Grieser, **Nicholas Deas**, Shana Kleiner, Desmond U. Patton, James Shepard, Elsbeth Turcan, and Kathleen McKeown. 2023. Exploring the Deficiencies of Large Language Models in Using AAL: An Interdisciplinary Study. *New Ways of Analyzing Variation 51*. Queens College CUNY.

Nicholas Deas, Cierra Oliveira, Riley Stotzky, and Leah Terry. 2022. Partisan Differences in Politicians' Rhetoric about COVID-19, and Why These Messages Spread Online. In *Midwest Political Science Association Conference*.

Nicholas Deas, Sophie Finnell, Emily Radovic, Hailey Carroll, Chelsea Robbins, Natalie Cote, Kelly Kiser, Isabella Lorenzo, Meredith Mock, Kelly Evans, Andrew Cook, Gabby Mochizuki, Lindsey Brewer, Kenzie Hurley, and Robin Kowalski. 2022. I Just Want To Matter!: Applying Natural Language Processing to Detect Psychological Constructs in Online Peer-Support Communities. In *Society of Personality and Social Psychology Conference*.

Robin Kowalski, **Nicholas Deas,** Noah Britt, Chelsea Robbins, Sophie Finnell, Kelly Evans, Hailey Carroll, Andrew Cook, Emily Radovic, Emily Richardson, Tanner Huyck, Bella Parise, Hannah Chitty, and Sophie Catanzaro. 2022. Protection Motivation Theory and Intentions to Receive the COVID-19 Vaccine. In *Society of Personality and Social Psychology Conference.*

Robin Kowalski, Kenzie M. Hurley, **Nicholas Deas**, Sophie Finnell, Emily Radovic, Kelly Evans, Andrew Cook, Chelsea Robbins, Lindsey Brewer, Gabby Mochizuki, and Hailley Carroll. 2021. Predicting Attitudes Toward COVID-19 Mask and Vaccine Mandates. In *Society of Southeastern Social Psychologists Conference.*

Robin Kowalski, Andrew Cook, Kaitlyn Rubley, Hailley Carroll, Emily Richardson, Catherine Chapman, Hannah Chitty, Kelly Evans, **Nicholas Deas**, Tanner Huyck, Bella Parise, Chelsea Robbins, and Mark Leary. 2020. Threats to Masculinity in K-12, College/University, and Mass Shootings. In *Society of Southeastern Social Psychologists Conference*.

Nicholas Deas, Jacob Sargent, and Spencer Shellnut. 2019. Using Natural Language Processing to Automate Detection of Targeted Attacks in Political Tweets. In *Midwest Political Science Association Conference*.

Jeffrey Fine, **Nicholas Deas**, Jacob Sargent, Spencer Shellnut, and D. Hudson Smith. 2019. Content Analyzing Political Tweets Using Natural Language Processing; Opportunities and Challenges. In *Southern Political Science Association Conference*.

Jacob Sargent, Spencer Shellnut, and **Nicholas Deas**. 2019. How Characteristics of Members of the House of Representatives and the Political Environment Affect the Use of Political Attacks on Twitter. In *Midwest Political Science Association Conference*.