Divyansh Kaushik

Language Technologies Institute

School of Computer Science

Carnegie Mellon University

Pittsburgh PA, USA

Phone: +1 (412) 627 7012

Email: dkaushik@cs.cmu.edu

Home: https://cs.cmu.edu/~dkaushik

Twitter: @dkaushik96

Education

[†] *Indicates expected*

2019–2022 [†]	Ph.D., Language and Information Technologies, Carnegie Mellon University
	Advisors: Zachary C. Lipton and Eduard Hovy
2017–2019	M.S., Language Technologies, Carnegie Mellon University
	GPA: 4.06/4.00, Advisor: Eduard Hovy
2013–2017	B.E., Computer Engineering, Thapar University
	GPA: 9.37/10, Award: IBM Best Student Award

Selected Research and Publications

Overview. Published eight peer-reviewed conference papers and one peer-reviewed workshop paper in machine learning and natural language processing (1 best paper award, two competitive oral and spotlight presentations) in venues such as ICLR, EMNLP, ACL, ICML, and NAACL with additional machine learning and NLP papers in submission. Work in my main line of research includes:

Learning the Difference that Makes a Difference with Counterfactually-Augmented Data (Spotlight). Divyansh Kaushik, Eduard Hovy, Zachary Lipton. International Conference on Learning Representations (ICLR), 2020.

Explaining the Efficacy of Counterfactually Augmented Data. Divyansh Kaushik, Amrith Setlur, Eduard Hovy, Zachary Lipton. International Conference on Learning Representations (ICLR), 2021.

How Much Reading Does Reading Comprehension Require? A Critical Investigation of Popular Benchmarks (Best Paper, Oral). Divyansh Kaushik, Zachary Lipton. Empirical Methods in Natural Language Processing (EMNLP), 2018.

Awards

2022	**Top Reviewer (top 10%).**	*Neural Information Processing Systems.*
2022	**Siebel Scholar, Class of 2023.**	*Siebel Scholars Foundation.*
2021	**Outstanding Reviewer (top 8%).**	*Neural Information Processing Systems.*
2021	**Standout Student Award.**	*ALL IN Campus Democracy Challenge.*
2021	**Graduate Research Fellowship.**	*Amazon.*
2021	**Outstanding Reviewer.**	*International Conference on Learning Representations.*
2020	**Top Reviewer (top 10%).**	*Neural Information Processing Systems.*
2020	**Award for national advocacy.**	*Students Learn Students Vote Coalition.*
2018	**Best Paper.**	*Empirical Methods in Natural Language Processing.*
2017	**Graduate Scholarship.**	*Narotam Sekhsaria Foundation.*

Teaching

2022	**Head Teaching Assistant: Introduction to NLP**	**CMU**

Mentored projects, created assignments, and held weekly office hours.

2021	**Teaching Assistant: Neural Networks for NLP**	**CMU**

Mentored projects, created assignments, and held weekly office hours.

2021	**Guest Lecture: Neural Networks for NLP**	**CMU**

Guest lecture on bias in NLP systems.

2020	**Teaching Assistant: LTI Colloquium**	**CMU**

Organized talks with speakers from around the world on topics in ML and NLP.

Mentorship

2021	**Masters in Computational Data Science (MCDS) students: Anurag Katakkar, Clay Yoo, and Weiqin Wang**	**CMU**

Studying out-of-domain benefits of feature feedback.

2021	**Master of Science in Intelligent Information Systems (MIIS) student: Sameer Jain**	**CMU**

Studying the underlying factors influencing out-of-domain robustness of pre-trained language models.

2020-21	**Master of Language Technologies (MLT) student: Amrith Setlur**	**CMU**

Explaining the efficacy of counterfactually augmented data.

Academic Service

2023   **Reviewer** *International Conference on Learning Representations.*

2023   **Reviewer** *European Chapter of the Association of Computational Linguistics.*

2022   **Reviewer** *Transactions of Machine Learning Research.*

2022   **Reviewer, Top Reviewer Award** *Neural Information Processing Systems.*

2022   **Reviewer** *Empirical Methods in Natural Language Processing.*

2022   **DE&I, Accessibility Co-Chair** *North American Chapter of the Association for Computational Linguistics.*

2022   **Reviewer** *Fairness, Accountability, and Transparency.*

2022   **Reviewer** *International Conference on Learning Representations.*

2021   **Reviewer, Outstanding Reviewer Award.** *Neural Information Processing Systems.*

2021   **Reviewer.** *Empirical Methods in Natural Language Processing.*

2021   **Reviewer.** *Association for Computational Linguistics.*

2021   **Reviewer.** *North American Chapter of the Association for Computational Linguistics.*

2021   **Reviewer, Outstanding Reviewer Award.** *International Conference on Learning Representations.*

2021   **Area Chair.** *ICLR Responsible AI Workshop.*

2021   **Reviewer.** *ACM Conference on Fairness, Accountability and Transparency.*

2020   **Reviewer, Top Reviewer Award.** *Neural Information Processing Systems.*

2020   **Organizer.** *Human & Machine in The Loop Evaluation & Training Strategies Workshop.*

2020   **Backup Reviewer.** *Association for Computational Linguistics.*
2020   **Reviewer.** *Association for Computational Linguistics Student Research Workshop.*
2020   **Backup Reviewer.** *Empirical Methods in Natural Language Processing.*
2020   **Reviewer.** *Empirical Methods in Natural Language Processing Insights Workshop.*
2020   **Reviewer.** *Conference on Natural Language Learning.*
2019   **Reviewer.** *Conference on Natural Language Learning.*
2019   **Reviewer.** *Association for Computational Linguistics Student Research Workshop.*

Invited Talks

Resolving the Human Subjects Status of Machine Learning's Crowdworkers.

Stanford University, Palo Alto CA	Aug. 2022

Learning the Difference that Makes a Difference With Counterfactually Augmented Data.

Bar-Ilan University, Israel	April 2021
Amazon AWS ML Services (Palo Alto, New York, Berlin)	June 2021

Robustifying NLP With Humans In The Loop.

Morgan Stanley Financial Services, NY	Sep. 2021
Georgia Tech University	Mar. 2022
University of California at Berkeley	Apr. 2022

Leveraging Your Scientific Expertise for Policymaking

Massachusetts Institute of Technology, MA.	April 2021
University of Kentucky, KY.	Nov. 2019
Lehigh University, PA.	April 2019
National Science Policy Network	June 2022

Press & Interviews

Dynabench.

MIT Tech Review. *Facebook wants to make AI better by asking people to break it.*	Aug 2020
Engadget. *Facebook's new benchmarking system asks humans to interrogate AIs.*	Aug 2020
Wired. *Go Ahead, Try to Sneak Bad Words Past AI Filters for Research.*	Aug 2020

Student Advocacy.

The Tartan. *Title IX under review.*	Mar. 2021
PublicSource. *I came to Pittsburgh for higher education in 2017. It's time to undo the harm Trump's rhetoric and policies brought to international students.*	Dec. 2020
US News. *Study: International Student Numbers in U.S. Drop.*	Nov. 2020
Mother Jones. *Betsy DeVos Rewrote Campus Sexual Assault Rules, But Survivor Activists Aren't Backing Down.*	Aug 2020
Pittsburgh Tribune Review. *Pennsylvania, Pittsburgh, students join effort to overturn ICE rule to deport international students.*	July 2020
The Tartan. *Frustration with CMU Administration: An Ineffective Response to Racism on Campus.*	June 2020
Politico. *Grad Students Urge Against Limiting OPT Program.*	June 2020
Chronicle of Higher Education. *Trump Suspends Temporary Work Visas but—for Now—Leaves Alone a Program for International Students.*	June 2020
The Tech. *Graduate students write letter to Trump in support of OPT and international students.*	June 2020
Pittsburgh Tribune Review. *Pennsylvania, Pittsburgh, students join effort to overturn ICE rule to deport international students.*	June 2020

PublicSource. *Planning amid the pandemic: An effort to steer Oakland's development*   April 2020
may have to reflect the new reality.

PBS Newshour. *Student scientists, athletes and artists miss opportunities when learn-*   Mar. 2020
ing moves online.

Op-Eds

[1] **High Skills Immigration A National Security Issue.** National Defense Magazine.

[2] **A Step Forward in Mitigating Existential Threats.** Federation of American Scientists.

[3] **Stop Turning Away The Next Einsteins.** The Dispatch.

[4] **Looking Beyond the Ballot Box: A Holistic View of Nonpartisan Democratic Engagement.**
Forbes.

[5] **Attracting (and Keeping) the Best and the Brightest.** Issues in Science and Technology.

[6] **I came to Pittsburgh for higher education in 2017. It's time to undo the harm Trump's
rhetoric and policies brought to international students.** PublicSource.

Policy Memos

[1] **Improving Graduate Student Mentorship by Investing in Traineeship Grants.** Institute for
Progress and Day One Project.

Peer Reviewed Publications

[1] **Practical Benefits of Feature Feedback Under Distribution Shift.** Anurag Katakkar, Clay
Yoo, Weiqin Wang, Zachary Lipton, Divyansh Kaushik. BlackboxNLP Workshop, 2022.

[2] **Impact of International Scientists, Researchers, and Students on the Research Output of
U.S. Universities. (Journal Cover)** Sarah M. Rovito, Divyansh Kaushik, Surya D. Aggarwal.
MIT Science Policy Review, 2021.

[3] **On the Efficacy of Adversarial Data Collection for Question Answering: Results from a
Large-Scale Randomized Study.** Divyansh Kaushik, Douwe Kiela, Zachary Lipton, Scott Yih.
Association for Computational Linguistics (ACL; Oral), 2021.

[4] **Dynabench: Rethinking Benchmarking in NLP.** Douwe Kiela, Max Bartolo, Yixin Nie,
Divyansh Kaushik, Atticus Geiger, Zhengxuan Wu, Bertie Vidgen, Grusha Prasad, Amanpreet
Singh, Pratik Ringshia, Zhiyi Ma, Tristan Thrush, Sebastian Riedel, Zeerak Waseem, Pontus
Stenetorp, Robin Jia, Mohit Bansal, Christopher Potts, Adina Williams. North American
Chapter of the Association for Computational Linguistics (NAACL), 2021.

[5] **Explaining the Efficacy of Counterfactually Augmented Data.** Divyansh Kaushik, Amrith
Setlur, Eduard Hovy, Zachary Lipton. International Conference on Learning Representations
(ICLR), 2021.

[6] **Learning the Difference that Makes a Difference with Counterfactually-Augmented Data
(Spotlight).** Divyansh Kaushik, Eduard Hovy, Zachary Lipton. International Conference on
Learning Representations (ICLR), 2020.

[7] **Domain Adaptation with Asymmetrically-Relaxed Distribution Alignment.** Yifan Wu, Ezra
Winston, Divyansh Kaushik, Zachary Lipton. International Conference on Machine Learning
(ICML; Oral), 2019.

[8] **How Much Reading Does Reading Comprehension Require? A Critical Investigation of Popular Benchmarks (**Best Paper**).** Divyansh Kaushik, Zachary Lipton. Empirical Methods in Natural Language Processing (EMNLP; Oral), 2018.

[9] **Making Travel Smarter: Extracting Travel Information From Email Itineraries Using Named Entity Recognition.** Divyansh Kaushik, Shashank Gupta, Chakradhar Raju, Reuben Dias, Sanjib Ghosh. Recent Advances in Natural Language Processing (RANLP), 2017.

[10] **Application of Data Mining for High Accuracy Prediction of Breast Tissue Biopsy Results.** Divyansh Kaushik, Karamjit Kaur. Digital Information Processing, Data Mining, and Wireless Communications (DIPDMWC), 2016.

Preprints

[1] **Resolving Human Subjects Status of Machine Learning's Crowdworkers** Divyansh Kaushik, Zachary Lipton, Alex John London.

Works In Progress

[1] **Evaluating Reliability of Evidence Extractors Under Plausible Distribution Shifts.** Divyansh Kaushik, Bilal Zafar, Matthew Lease, Zachary Lipton, Krishnaram Kenthapadi.

Work Experience

2022 **Research Intern, Salesforce**
Creating a toolkit to perform human evaluations of generative models.

2021 **Research Intern, Amazon AWS**
Studying the robustness and reliability of interpretability methods in NLP.

2020 **Student Researcher, Facebook AI Research**
Studying adversarial data collection and potential benefits vis-a-vis generalization out-of-domain.

2020 **Research Intern, Facebook AI Research**
Helped build Dynabench and studied adversarial data collection.

2017 **Research Intern, Amadeus**
Studied named entity recognition in travel itineraries.

Civic Engagement and Service on University Committees

2021-2023 **President**, Carnegie Mellon University Graduate Student Assembly
2019-2022 **Steering Committee Member**, City of Pittsburgh's Oakland Neighborhood Plan
2019-2021 **Vice President (External Affairs)**, Carnegie Mellon University Graduate Student Assembly
2021 **Founding Member**, White House COVID-19 Community Corps
2021 **Advisory Board Member**, Students Learn Students Vote Coalition
2021-2022 **Member**, University-Leadership Students Advisory Council
2021-2022 **Graduate Student Representative**, University Hourly-Wage Workers Compensation Working Group

2021-2022	**Graduate Student Representative**, University Academic Calendar Innovation Committee
2021	**Graduate Student Representative**, LTI Faculty Hiring Student Advisory Group
2020-2021	**Member**, University-Leadership Students Advisory Council
2018-2019	**Chair of Federal Advocacy**, Carnegie Mellon University Graduate Student Assembly
2018	**Search Committee Member**, University Search Committee for the Executive Director of Counseling and Psychological Services
2018-2019	**Member**, University-Leadership Students Advisory Council

References

Available on request.