

Vishakh Padmakumar

Education

- 2020–Present **PhD Student**, *Center for Data Science, New York University (NYU), NY, CGPA – 3.96/4.*
Advisor: Dr. He He
Area: NLP, Text Generation, Human Computer Interaction
- 2018–2020 **Masters in Computer Science**, *Courant Institute of Mathematical Sciences, New York University (NYU), NY, CGPA – 3.95/4.*
- 2014–2018 **Bachelors in Information Technology**, *National Institute of Technology (NIT) Karnataka, Surathkal, CGPA – 8.75/10.*

Experience

Publications

Does Writing with Language Models Reduce Content Diversity?, *Paper.*

Vishakh Padmakumar, He He
Under submission at ICLR 2023

Creativity Support in the Age of Large Language Models: An Empirical Study Involving Emerging Writers, *Paper.*

Tuhin Chakrabarty*, **Vishakh Padmakumar***, Faeze Brahman, Smaranda Muresan
Under submission at CHI 2023

Testing the General Deductive Reasoning Capacity of Large Language Models Using OOD Examples, *Paper.*

Abulhair Saparov, Richard Yuanzhe Pang, **Vishakh Padmakumar**, Nitish Joshi, Mehran Kazemi, Najoung Kim, He He
Neurips 2023

Extrapolative Controlled Sequence Generation via Iterative Refinement, *Paper.*

Vishakh Padmakumar, Richard Pang, He He, Ankur Parikh
ICML 2023

Reward Gaming in Conditional Text Generation, *Paper.*

Richard Yuanzhe Pang, **Vishakh Padmakumar**, Thibault Sellam, Ankur P Parikh, He He
ACL 2023

Investigating The Representation Of Open Domain Dialogue Context For Transformer Models, *Paper.*

Vishakh Padmakumar, Behnam Hedayatnia, Di Jin, Patrick Lange, Seokhwan Kim, Nanyun Peng, Yang Liu, Dilek Hakkani-Tür
SIGDIAL 2023

Help me write a poem: Instruction Tuning as a Vehicle for Collaborative Poetry Writing, *Paper.*

Tuhin Chakrabarty*, **Vishakh Padmakumar***, He He
EMNLP 2022

Machine-in-the-Loop Rewriting for Creative Image Captioning, *Paper.*

Vishakh Padmakumar, He He
NAACL 2022

Exploring the Role of Task Transferability in Large-Scale Multi-Task Learning.

Vishakh Padmakumar, Leonard Lausen, Miguel Ballesteros, Sheng Zha, He He, George Karypis
NAACL 2022

QuALITY: Question Answering with Long Input Texts, Yes!, *Paper*.

Richard Yuanzhe Pang*, Alicia Parrish*, Nitish Joshi*, Nikita Nangia, Jason Phang, Angelica Chen,
Vishakh Padmakumar, Johnny Ma, Jana Thompson, He He and Sam Bowman.
NAACL 2022

BBQ: A Hand-Built Bias Benchmark for Question Answering, *Paper*.

Alicia Parrish, Angelica Chen, Nikita Nangia, **Vishakh Padmakumar**, Jason Phang, Jana Thompson,
Phu Mon Htut, Samuel R. Bowman
ACL Findings 2022

Unsupervised Extractive Summarization using Pointwise Mutual Information, *Paper*.

Vishakh Padmakumar, He He
EACL 2021

A comparison of methods in political science text classification: Transfer learning language models for politics, *Paper*.

Zhanna Terechshenko, Fridolin Linder, **Vishakh Padmakumar**, Michael Liu, Jonathan Nagler, Josh Tucker, Richard Bonneau
SSRN

Positions Held

- May-Oct 2022 **Applied Scientist Intern, Amazon Alexa AI**, Sunnyvale, CA.
 - o *Mentor(s)*: Yang Liu, Dilek Hakkani-Tur
- May-Oct 2021 **Applied Scientist Intern, Amazon Web Services**, New York, NY.
 - o *Mentor(s)*: Leonard Lausen, Miguel Ballesteros, George Karypis
- May-Aug 2019 **Machine Learning Intern, Laer.AI**, New York, NY.
 - o *Mentor(s)*: Igor Labutov, Bishan Yang
- Oct 2018 - May 2020 **Graduate Research Associate, Center for Social Media and Politics, NYU**.
 - o *Mentor(s)*: Richard Bonneau, Fridolin Linder, Zhanna Terechshenko
- May-Jul 2017 **Software Development Intern, Microsoft - IDC**, Bangalore.
 - o *Mentor(s)*: Vageesh Banga, Darshan Jawalebhoi - Dynamics 365 Team

Professional Service

- 2022-23 Chair of the ACL 2023 Student Research Workshop
- 2021- Student Coordinator of the NYU NLP/Text-as-Data Speaker Series
- 2021- Reviewer for ACL Rolling Review, ACL 2023, EMNLP 2023, Workshop on Narrative Understanding 2023, In2Writing 2023, ME-FoMo 2023
- 2017-18 Convenor of the Association for Computing Machinery (ACM) - NITK Chapter
- 2017 Co-founded the Mozilla Campus Club at NITK to foster open source contributions.

Achievements

- 2022 Received the CDS Best Teaching Assistant award for the Spring 22 semester
- 2020-25 Received the NYU Data Science Fellowship
- 2020 Received the NYU Data Science Supplementary Fellowship Grant
- 2019 Semi-Finalist in the NYU Threesis Academic Challenge
- 2012-2018 Awarded the National Talent Search Scholarship by NCERT. Government of India

Open Source Contributions

SMaBERTa, *Code*.

- Wrapper package for the HuggingFace Transformers library used by political scientists at the Center for Social Media and Politics for text classification.

Multiscale Multifractal Time Series Analysis, *Code*.

- Created and maintained the TSeriesMMA R package on the CRAN Project

Other Selected Projects

Multi-Modal Content Similarities in Online Disinformation Campaigns, *Ext. Abstract*.

Cody Buntain, **Vishakh Padmakumar**, Richard Bonneau, Jonathan Nagler, Josh Tucker
ACM Conference on Collective Intelligence, June, 2020.

Counterfactual Logit Pairing with Asymmetric Counterfactuals, *Paper*.

Vishakh Padmakumar, Lucius Bynum

Transfer of Reinforcement Learning in a Natural Language Action Space, *Paper*.

Vishakh Padmakumar, Francesco Preta

A Robust Approach to Open Vocabulary Image Retrieval with Deep Convolutional Neural Networks and Transfer Learning, *Paper*.

Vishakh Padmakumar, Rishab Ranga, Srivalya Elluru, Sowmya Kamath S

2018 Pacific Neighborhood Consortium Annual Conference and Joint Meetings (PNC). IEEE, 2018.