

Varun Mulchandani

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Location: Raleigh, NC, USA ; Citizenship: U.S. Citizen

Research Interests: Reasoning, Out-of-Distribution Generalization, Spurious and Invariant Correlations.

Education

North Carolina State University Raleigh, NC, USA
PhD in Computer Science, Advisor: Dr. Jung-Eun Kim Aug 2024 -

North Carolina State University Raleigh, NC, USA
Master of Science in Computer Science, Thesis Advisor: Dr. Jung-Eun Kim Aug 2022 – Jul 2024

- Full Tuition Waiver (3/4 semesters), GPA: 4.0/4.0

Vellore Institute of Technology Vellore, TN, India
B.Tech in Computer Science and Engineering July 2018 – May 2022

- GPA: 9.34/10

Publications

- [1] **Varun Mulchandani** and Jung-Eun Kim. Severing Spurious Correlations with Data Pruning. In International Conference on Learning Representations (**ICLR**), 2025 (**Spotlight, < 5.1%**).
- [2] Xingli Fang, Jianwei Li, **Varun Mulchandani** and Jung-Eun Kim. Trustworthy AI: Safety, Bias, and Privacy - A Survey, 2025.
- [3] **Varun Mulchandani**. Pruning's Impact on Spurious Correlations: Using the Right Metrics the Wrong Way. Masters Thesis, 2024.

Experience

North Carolina State University Raleigh, NC, USA
Graduate Research Assistant; Advisor - Dr. Jung-Eun Kim September 2022 – Present

- Teaching large language models to ignore irrelevant context in reasoning tasks. Training all deep neural networks to learn representations that are robust to shifts in distribution.

Lawrence Livermore National Laboratory Livermore, CA, USA
Computing Graduate Student Intern June 2025 – Aug 2025
Mentors: Dr. Bhavya Kailkhura and Dr. Brian Bartoldson

- Worked on improving reasoning abilities of large language models trained with reinforcement learning through continual pre-training and model compression.

Sandia National Laboratories Albuquerque, NM, USA
Graduate Research and Development Intern; Mentor - Dr. Carter Jameson May 2023 – August 2023

- Built language models to identify occurrences of classified information in official government documents.

RoboTutor, Carnegie Mellon University Pittsburgh, PA, USA(Remote)
Undergraduate Research Intern; Advisor - Dr. Jack Mostow January 2021 – May 2022

- Reordered the Instructional Sequence of an Intelligent Tutoring System to enhance student learning and engagement with the help of metaheuristic optimization algorithms and machine learning.

UBS Hyderabad, TG, India(Remote)
Summer Analyst Intern June 2021 – August 2021

- Built tools to automate Data Engineering tasks that were being performed manually daily.

AWARDS

NC State Graduate Merit Award, 2024 (3000\$)

NC State Travel Grant, 2025 (1000\$)

Chancellor Merit Scholarship Award, 2019

TECHNICAL SKILLS

Proficient: Python, PyTorch, NumPy, Bash Scripting

Intermediate: Java, SQL, Scikit-Learn, Flask, spaCy