

Varun Mulchandani

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

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%).

Experience

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

- Discovered that spurious correlations in deep neural networks are learned due to only a handful of all samples containing spurious features. Based on this insight, created a data pruning technique to overcome spurious correlations even when domain knowledge is not inferable or human intervention is not feasible.
- **Current Research Directions:** Improving scaling laws of large language models on math reasoning tasks; Studying the role of data availability on spurious feature reliance; Identifying the impact of model compression on out-of-distribution generalization.

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. Keywords: Question-Answering Systems, Transformer based entity-linkers.

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