VARUN CHANDRASHEKHAR GOHIL

Email : varuncgohil@gmail.com   **Website** : varungohil.github.io
Phone Number : 607-405-9483   **GitHub ID** : varungohil

EDUCATION

Massachusetts Institute of Technology	September 2022 - Present
PhD, Electrical Engineering and Computer Science	GPA: 5.0/5.0
Indian Institute of Technology Gandhinagar	July 2016 - July 2020
B.Tech, Computer Science and Engineering	CPI: 9.04/10

EXPERIENCE

Student Researcher (Part-time), Google   June 2024 - August 2024
Hosts : Sundar Dev, David Lo, Gaurang Upasani

Research Intern, Google   June 2023 - August 2023
Hosts : Sundar Dev, David Lo, Gaurang Upasani

Research Intern, Google   June 2022 - August 2022
Hosts : Sundar Dev, David Lo

Graduate Researcher, Cornell University   August 2021 - May 2022
Advisor : Prof. Christina Delimitrou

Research Fellow, Ashoka University   August 2020 - July 2021
Advisor : Prof. Manu Awasthi

Visiting Scholar, University of Utah   May 2019 - July 2019
Advisor : Prof. Rajeev Balasubramonian

Summer Research Intern, IIT Gandhinagar   May 2018 - July 2018
Advisor : Prof. Manu Awasthi

AWARDS AND HONORS

· Awarded the Jacobs Fellowship at Cornell University	2021
· Awarded cash prize of Rs.12,500 by IIT Gandhinagar for undergraduate research	2021
· Best Presentation Award Finalist, HotStorage	2020
· Received Special Mention in Undergraduate Research Conclave, IIT Gandhinagar.	2019
· Secured a position in Top 5 for poster presentation at SRIP, IIT Gandhinagar.	2018

PUBLICATIONS   ** indicates equal contribution*

The Sunk Carbon Fallacy: Rethinking Carbon Footprint Metrics for Effective Carbon-Aware Scheduling
Noman Bashir, <u>Varun Gohil</u>, Anagha Belavadi Subramanya, Mohammad Shahrad, David Irwin, Elsa Olivetti, and Christina Delimitrou
ACM Symposium on Cloud Computing, **(SoCC)**, 2024

The Importance of Generalizability in Machine Learning for Systems

<u>Varun Gohil</u>, Sundar Dev, Gaurang Upasani, David Lo, Parthasarathy Ranganathan, Christina Delimitrou

IEEE Computer Architecture Letters, (**CAL**), 2024

Sabre: Improving Memory Prefetching in Serverless MicroVMs with Near-Memory Hardware-Accelerated Compression

Nikita Lazarev, <u>Varun Gohil</u>, James Tsai, Andy Anderson, Bhushan Chitlur, Zhiru Zhang, Christina Delimitrou

18th USENIX Symposium on Operating Systems Design and Implementation (**OSDI**), 2024

Performance optimization opportunities in the Android software stack

<u>Varun Gohil</u>*, Nisarg Ujjainkar*, Joycee Mekie, Manu Awasthi

BenchCouncil Transactions on Benchmarks, Standards and Evaluations (**TBench**), October 2021

Fixed-Posit: A Floating-Point Representation for Error-Resilient Applications

<u>Varun Gohil</u>*, Sumit Walia*, Joycee Mekie, Manu Awasthi

IEEE Transactions on Circuits and Systems II : Express Briefs (**TCAS-II**), April 2021

Prefetching in Hybrid Main Memory Systems

Subisha V, <u>Varun Gohil</u>, Nisarg Ujjainkar, Manu Awasthi

12th USENIX Workshop on Hot Topics in Storage and File Systems (**HotStorage**) 2020

[Reproducibility Report] One ticket to win them all: generalizing lottery ticket initializations across datasets and optimizers

<u>Varun Gohil</u>*, S. Deepak Narayanan*, Atishay Jain*

NeurIPS Reproducibility Challenge, **ReScience C**, 2020.

Effect of Feature Hashing on Fair Classification

Ritik Dutta*, <u>Varun Gohil</u>*, Atishay Jain*

Young Researchers' Symposium, ACM India Joint International Conference on Data Science & Management of Data, (**CODS-COMADS**) 2020

FAB: Framework for Analyzing Benchmarks

<u>Varun Gohil</u>*, Shreyas Singh*, Manu Awasthi

Work in Progress Track, 10th International Conference on Performance Engineering (**ICPE**) 2019

META: Memory Exploration Tool for Android Devices

Nisarg Parikh, <u>Varun Gohil</u>, Manu Awasthi

Poster Track, 24th International Conference on Mobile Computing and Networking (**MobiCom**) 2018

SERVICE

· **Mentoring** :
  - MIT PRIMES 2022 : Mentored two high school students through their first research project

· **Teaching Assistant** :
  - 6.1910 Computation Structures, MIT   Fall 2024
  - Machine Learning, IIT Gandhinagar   Spring 2020
  - Operating Systems, IIT Gandhinagar   Fall 2019

· **Program Committee, Reviewer** :
  - ML for Systems workshop, NeurIPS 2024

· **Organization**:
  - Grad School Application Tweet Storm with Students@Systems   2022
  - Pre-conference volunteer for ICLR   2020
  - Tutorial on DRAM timing parameters, Computer Architecture Winter School (CAWS)   2020