

VARUN CHANDRASHEKHAR GOHIL

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EDUCATION

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

AWARDS AND HONORS

- Placed third in ArchReasoning Challenge held at ISCA 2025 2025
- Best Paper of Computer Architecture Letters 2024
- 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 Dean's List, IIT Gandhinagar for excellent academic performance in all semesters

PUBLICATIONS

(paper titles are hyperlinked)

When Machine Learning Isn't Sure: Building Resilient ML-Based Computer Systems by Embracing Uncertainty
Varun Gohil, Nevena Stojkovic, Noman Bashir, Sundar Dev, Gaurang Upasani, David Lo, Parthasarathy Ranganathan, Christina Delimitrou
Annual Conference on Machine Learning and Systems, (**MLSys**), 2026

The Importance of Generalizability in Machine Learning for Systems
Varun Gohil, Sundar Dev, Gaurang Upasani, David Lo, Parthasarathy Ranganathan, Christina Delimitrou
IEEE Computer Architecture Letters, (**CAL**), 2024
Selected as Best of IEEE Computer Architecture Letters 2024

Sabre: Improving Memory Prefetching in Serverless MicroVMs with Near-Memory Hardware-Accelerated Compression
Nikita Lazarev, Varun Gohil, James Tsai, Andy Anderson, Bhushan Chitlur, Zhiru Zhang, Christina Delimitrou
18th USENIX Symposium on Operating Systems Design and Implementation (**OSDI**), 2024

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

Performance optimization opportunities in the Android software stack
Varun Gohil*, 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

Varun Gohil*, 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, Varun Gohil, 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

Varun Gohil*, S. Deepak Narayanan*, Atishay Jain*

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

Effect of Feature Hashing on Fair Classification

Ritik Dutta*, Varun Gohil*, Atishay Jain*

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

FAB: Framework for Analyzing Benchmarks

Varun Gohil*, 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, Varun Gohil, Manu Awasthi

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

EXPERIENCE

Student Researcher, Google

Hosts : Suvinay Subramanian, Kavya Sreedhar, Amir Yazdanbakhsh

June 2025 - August 2025

Part-time Student Researcher, Google

Hosts : Sundar Dev, David Lo, Gaurang Upasani

June 2024 - August 2024

Research Intern, Google

Hosts : Sundar Dev, David Lo, Gaurang Upasani

June 2023 - August 2023

Research Intern, Google

Hosts : Sundar Dev, David Lo

June 2022 - August 2022

Graduate Researcher, Cornell University

Advisor : Prof. Christina Delimitrou

August 2021 - May 2022

Research Fellow, Ashoka University

Advisor : Prof. Manu Awasthi

August 2020 - July 2021

Visiting Scholar, University of Utah

Advisor : Prof. Rajeev Balasubramonian

May 2019 - July 2019

Summer Research Intern, IIT Gandhinagar

Advisor : Prof. Manu Awasthi

May 2018 - July 2018

SERVICE

· Program Committee, Reviewer:

- ML for Systems workshop, NeurIPS

2025, 2024

- **Mentoring:**
 - Nevena Stojkovic
Project : Uncertainty-aware resource management for microservices
 - Angel Cervantes
Project : Benchmarking Compound-AI applications
 - Paramuth Samuthrsindh
Project : Benchmarking Compound-AI applications
 - Alan Song
Project : Reinforcement learning approaches for serverless autoscaling
Selected as Regeneron Science Talent Search (STS) scholar
 - Evan Ning
Project : Reinforcement learning approaches for serverless autoscaling
 - **Teaching Assistant:**
 - 6.S984 Datacenter Computing, MIT
 - 6.1910 Computation Structures, MIT
 - Machine Learning, IIT Gandhinagar
 - Operating Systems, IIT Gandhinagar
 - **Organization:**
 - Grad School Application Tweet Storm with Students@Systems
 - Pre-conference volunteer for ICLR
 - Tutorial on DRAM timing parameters, Computer Architecture Winter School (CAWS)
- MIT UROP 2025-Present
- MIT UROP 2025-Present
- MIT UROP 2025-Present
- MIT PRIMES 2023
- MIT PRIMES 2023
- Spring 2026
- Fall 2025, 2024
- Spring 2020
- Fall 2019
- 2022
- 2020
- 2020