

RESEARCH
INTERESTS

- Operating systems and computer networking.

EXPERIENCE

- University of Virginia — Assistant Professor** | Charlottesville, VA 2025.07 – Present
- Assistant Professor, Department of Computer Science.
- Enfabrica — Member of Technical Staff** | Mountain View, CA 2024.07 – 2025.07
- Member of Technical Staff.
- Google Inc. — Student Researcher** | Mountain View, CA 2022.01 – 2022.08
- Student Researcher.
- Cornell University — Research Assistant** | Ithaca, NY 2018.01 – 2024.07
- Research Assistant, Department of Computer Science.
- Princeton University — Research Assistant** | Princeton, NJ 2017.02 – 2018.05
- Research Assistant, Department of Computer Science.

EDUCATION

- Cornell University** Ithaca, NY
- Ph.D. in Computer Science* 2018.08 – 2024.05
- Overall GPA: 4.0/4.0.
 - Thesis: *Design Efficient Network Stacks/Protocols for Terabit Ethernet.*
 - Advisor: Prof. Rachit Agarwal.
- Princeton University** Princeton, NJ
- M.S.E. (thesis-track) in Computer Science* 2016 – 2018.06
- Overall GPA: 3.95/4.0.
 - Thesis: *Network-Wide Heavy Hitter Detection For Real-Time Telemetry.*
 - Advisor: Prof. Jennifer Rexford.
- University of Michigan** Ann Arbor, MI
- B.S.E. in Computer Science, Summa Cum Laude* 2012 – 2016
- Overall GPA: 3.956/4.0.

PROFESSIONAL
ACTIVITIES

- Program Committee:** USENIX NSDI 2026; SOSP SysDW Workshop (2024).
- Community Service:** SIGCOMM Artifact Evaluation Co-chair (2025).
- External Reviewer:** *IEEE Transactions on Network and Service Management, IEEE Transactions on Mobile Computing, Computer Networks, IEEE Transactions on Consumer Electronics, IEEE Network Magazine.*

AWARDS
AND
HONORS

- **Meta Fellowship** 2022
- **James B. Angell Scholar**, University of Michigan 2014, 2015, 2016
- **Dean's List**, University of Michigan 2013, 2014, 2015
- **University Honors**, University of Michigan 2012, 2013, 2014, 2015

- PUBLICATIONS
1. Benny Rubin, Saksham Agarwal, **Qizhe Cai**, Rachit Agarwal. Fast and Safe Memory Protection for Networked Systems. *ACM SOSP*, 2024.
 2. Athinagoras Skiadopoulos, Zhiqiang Xie, Mark Zhao, **Qizhe Cai**, Saksham Agarwal, Jacob Adelman, David Ahern, Carlo Contavalli, Michael Goldflam, Vitaly Mayatskikh, Raghu Raja, Daniel Walton, Rachit Agarwal, Shrijeet Mukherjee, Christos Kozyrakis. High-throughput and Flexible Host Networking for Accelerated Computing. *USENIX OSDI*, 2024.
 3. Saksham Agarwal, **Qizhe Cai**, Rachit Agarwal, David Shmoys, Amin Vahdat. Harmony: A Congestion-free Datacenter Architecture. *USENIX NSDI*, 2024.
 4. **Qizhe Cai**, Midhul Vuppalapati, Jaehyun Hwang, Christos Kozyrakis, Rachit Agarwal. Towards μ s Tail Latency and Terabit Ethernet: Disaggregating the Host Network Stack. *ACM SIGCOMM*, 2022.
 5. **Qizhe Cai**, Mina Tahmasbi Arashloo, Rachit Agarwal. dcPIM: Near-Optimal Proactive Datacenter Transport. *ACM SIGCOMM*, 2022.
 6. **Qizhe Cai**, Shubham Chaudhary, Midhul Vuppalapati, Jaehyun Hwang, Rachit Agarwal. Understanding Host Network Stack Overheads. *ACM SIGCOMM*, 2021.
 7. Jaehyun Hwang, **Qizhe Cai**, Rachit Agarwal, Ao Tang. I10: A Remote Storage I/O Stack for High-Performance Network and Storage Hardware. *USENIX NSDI*, 2020.
 8. Rob Harrison, **Qizhe Cai**, Arpit Gupta, Jennifer Rexford. Network-Wide Heavy Hitter Detection with Commodity Switches. *ACM SOSR*, 2018.